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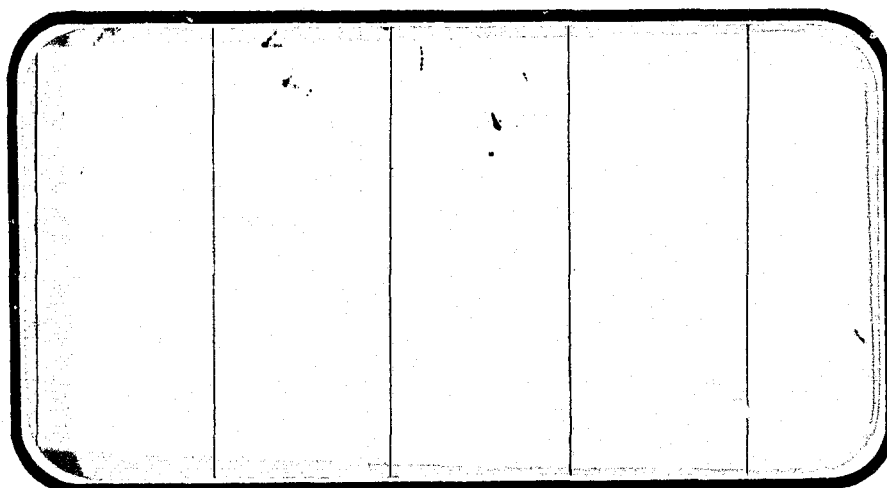
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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR-

141527



(NASA-CR-141527) ENTRY HEAT TRANSFER TESTS
OF THE 0.006-SCALE SPACE SHUTTLE ORBITER
MODEL (50-0) IN LANGLEY RESEARCH CENTER
FREON TUNNEL AT MACH 6 (OH45)
Aerothermodynamic Data Report. (Chrysler

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT



JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANAGEMENT services

SPACE DIVISION



CHRYSLER
CORPORATION

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ENTRY HEAT TRANSFER TESTS OF THE
0.006-SCALE SPACE SHUTTLE (-147B) ORBITER
MODEL (50-0) IN THE LANGLEY RESEARCH CENTER
FREON TUNNEL AT MACH 6 (OH45)

By

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Rockwell International, Space Division

Prepared under NASA Contract Number NAS9-13247

by

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Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division
Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL SPECIFICS:

Test Number: LRC CF4, 121-137
NASA Series Number OH45
Model Number: 50-0
Date: 2 November 1973 to 9 November 1973
Occupancy: 46 Hours

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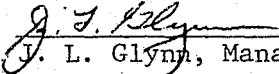
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ENTRY HEAT TRANSFER TESTS OF THE
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ABSTRACT

Presented herein are results of heat transfer tests of a 147B configuration orbiter model (50-0) conducted in the NASA Langley Research Center Freon Tunnel (LRC/CF₄). These tests were conducted at a nominal Mach number of 6, and at Reynolds numbers of 0.3 and 0.5 x 10⁶ per foot. The objectives of the tests were to determine the effects of the low freon specific heat ratio, γ , on the heating distributions and to determine the impingement of the orbiter bow shock on the wing.

The data presented include thin skin heat transfer data (tabulated data and plotted data).

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COEFFICIENT SCHEDULE:

A: H/HREF vs. X/L

B: H/HREF vs. X/C

INTRODUCTION

The use of air as a test media to simulate hypersonic flight is for most conditions limited due to the inability to provide air of sufficiently high temperature. In particular, when attempting to simulate hypersonic flight of large vehicles in planetary atmospheres, the chemical dissociation in the high-temperature gas behind the shock wave creates large density ratios which cannot be simulated. It has been found that these large density ratios can be experimentally obtained, without chemical dissociation, in a media of relatively low temperature and low ratio of specific heats. The use of freon in a wind tunnel to obtain large shock density ratios and thus simulate real gas effects for hypersonic flight is described in Reference (1).

Thin-skin heat transfer tests of a scaled Space Shuttle orbiter (Test OH45, Model 50-0) were conducted in a freon tunnel (described in Reference (1)) to obtain a more accurate simulation of atmospheric entry flight conditions. The purpose of this report is to present the results of these tests and how they were obtained.

NOMENCLATURE

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>	<u>Units</u>
b		Model skin thickness	inches
c		Specific heat of model material	BTU/lbm-°R
Cp	CP	Specific heat at constant pressure of airstream	BTU/lbm-°R
h	H	Heat transfer coefficient	BTU/ft ² -sec-°R
h/h ₀	H/HREF	Ratio of local to reference heat transfer coefficients, h/h ₀	
H		Enthalpy	BTU/lb
M	MACH	Mach number	
P		Pressure	psia
\dot{q}		Heat flux	BTU/ft ² -sec
\dot{q}_{ot}		Stagnation point heat transfer rate calculated using Fay and Riddel's equation	BTU/ft ² -sec
rs		Radius of scaled one foot sphere	ft.
r	HAW/HT	Adiabatic wall temperature ratio, Taw/To	
R		Gas constant	ft-lb/slug-°R
Re	RN/L	Reynolds number	
t		Time	sec.
T		Temperature	°R
u		Velocity	ft/sec

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>	<u>Units</u>
W		Density of model material	lbm/ft ³
x	X	Distance along the curved surface of a scaled one foot sphere	ft.
X/L	X/L	Longitudinal location of fuselage surface, X/L, fraction body length	
X/C	X/C	Longitudinal location on wing lower surface, X/C, fraction wing chord	
Z(WL)	Z(WL)	Vertical distance measured from W.L. (vertical tail reference root chord)	inches
Y(BP)	Y(BP)	Lateral distance from C.L.	inches
2Y/B	2Y/B	Local spanwise position/wing semi-span	
μ		Viscosity	lb-sec/ft ²
ρ		Density	lb-sec ² /ft ⁴
<u>Angles:</u>			
α	ALPHA	Angle between model centerline and wind vector	degrees
α_s	ALPHAS	Pitch angle of the support strut sector	degrees
β	BETA	Angle of sideslip	degrees
ϕ	PHI	Roll angle of model	degrees
ϕ_s	PHIS	Roll angle of the model sting adapter	degrees
<u>Subscripts:</u>			
aw		Adiabatic wall	
∞		Tunnel freestream conditions	

NOMENCLATURE (Concluded)

Subscripts: (Con't)

o or T	Tunnel stagnation conditions
t	Theoretical
w	Model wall conditions
'	Prime quantities indicate conditions behind normal shock

REMARKS

Seventy-seven thermocouples were used to obtain thin-skin heat transfer data at the test conditions shown in Table I. The run schedule shown in Table II lists the sixteen good heat transfer runs and three good oil flow runs obtained during the test.

In addition to thin-skin heat transfer data, oil flow data was obtained during Test OH45. Three oil flow runs were made at the end of the test using the 50-0 model, without its instrumentation hooked-up, and a -139A modified orbiter model. The -139A modified orbiter was configuration #4 of the 46-0 thermal paint model. It was non-instrumented. Polaroid photographs were taken of the oil flow patterns after each run.

Since the oil flow runs were not pertinent to the purpose of Test OH45, they will not be discussed throughout this report except as follows:

1. The test conditions are presented in Table I.
2. The run conditions are presented in Table II.
3. The -139A modified orbiter nomenclature are presented in "Configurations Investigated", and the dimensional data are presented in Table IV. Reference (2) gives a description of the -139A modified orbiter.
4. The oil flow model coating is described in "Test OH45 Test Procedures".

The model 50-0 instrumentation did not present any problems during the test; however, two faulty thermocouples, #8 and #14, were found during model installation, and one thermocouple, #54, had its polarity reversed. They were not fixed for the test.

CONFIGURATIONS INVESTIGATED

Model 50-0 is a 0.006-scale representation of the Space Shuttle orbiter. It is a full-span cast stainless steel (17-4 PH) model of orbiter lines -147B. It has thin skin inserts on the bottom centerline, top centerline, windshield area, left fuselage side, and left wing lower surface. Elevon, rudder, and body flap deflections were not simulated.

Nomenclature for model 50-0 is as follows:

B ₂₂	Fuselage (-147B Lines)
C ₇	Canopy
F ₅	Body Flap
M ₄	OMS Pod
V ₇	Vertical Tail
W ₁₁₁	Wing

Table III presents the model 50-0 dimensional data.

Nomenclature for the -139A modified orbiter (46-0, #4 model) is as follows:

B ₁₇	Fuselage (-139A Lines).
C ₇	Canopy
F ₅	Body Flap
M ₄	OMS Pod
V ₇	Vertical Tail
W ₁₀₄ (modified)	Wing

Table IV presents the -139A modified orbiter dimensional data.

INSTRUMENTATION

Instrumentation on model 50-0 consisted of seventy-seven iron-constantan thermocouples, with Kapton insulation, spot welded to the thin-skin inserts. The location of each thermocouple and the skin thickness at each location are given in Table V. Figure 1 illustrates the thermocouple locations.

Tunnel parameter instrumentation consisted of two pressure transducers and one thermocouple. The transducers measured tunnel stagnation pressure and the nozzle exit pitot pressure. The thermocouple measured tunnel stagnation temperature.

All model 50-0 thermocouples could not be recorded simultaneously. Depending on their location, they were divided into two groups for recording during separate runs. The two thermocouple groups are shown in Table VI.

FACILITY DESCRIPTION

Test OH45 was conducted in the NASA LRC Freon Tunnel. Freon 14 was the test medium. The tunnel has an open-jet test section with a core about fifteen inches in diameter. It operates at a nominal Mach number of 6 and over a nominal Reynolds number range of 0.1 to 0.7×10^6 per foot.

Reference (1) shows operating characteristics for the NASA LRC Freon Tunnel.

TEST PROCEDURES

The model was sting mounted to a 30 degree offset sting adapter used for obtaining 25, 30, and 35 degree angles of attack. The adapter attached to the model support strut. Thermocouple leads were routed through the offset sting adapter and then taped externally to the support strut. Figures 2a, b, and c show model 50-0 installed in the LRC/CF₄ Tunnel.

Model 50-0 was programmed automatically to inject and stay on the tunnel centerline for three seconds to record the thin-skin heat transfer data.

Angles of attack (α) and angle of sideslip (β) were obtained by simultaneously pitching and rolling the model at the offset sting adapter according to the following equations:

$$\alpha = \tan^{-1} (\tan \alpha_s \cos \phi)$$

$$\beta = \sin^{-1} (\sin \alpha_s \sin \phi)$$

where α_s is the pitch angle of the strut sector, and ϕ is the model roll angle.

Changing the thermocouple recording between group A and group B required a simple switch of instrumentation patchboards; therefore groups A and B were run "back-to-back" for a given set of model and test conditions. Thus all thermocouples were recorded on tape through the Data Acquisition System (DAS) for given model and test conditions. For each run, thermocouples not recorded on the DAS were recorded on oscillograph traces as back-up data.

TEST PROCEDURES (Concluded)

One colored Schlieren per run was taken during acquisition of the thin-skin heat transfer data. Schlieren pictures of the model planform were obtained by rolling the model and the bent sting adapter 90 degrees. Only wing thermocouples were recorded during these runs which, except for tunnel flow irregularities, were repeats of the runs at 0 degrees roll.

For the oil flow runs, the model was first coated with 125 cs viscosity oil. Then a lamp black and 50 cs viscosity oil mixture was splattered on the model with a stiff bristle brush. For the -139A modified orbiter, white lead was mixed with the lamp black to provide contrast.

DATA REDUCTION

The thermocouple heat transfer data was reduced using the one-dimensional thin wall equation:

$$\dot{q} = Wcb \frac{dT_w}{dt}, \text{ BTU/ft}^2(\text{sec}) \quad (1)$$

where the symbols are defined in the nomenclature section. Stainless steel 17-4 PH was used in the fabrication of instrumented thin skin sections. A curve of specific heat, c , as a function of temperature is presented in figure 3. All thermocouples were iron-constantan. The material thickness for each thermocouple location is presented in Table V. The density, W , of the model material is given below:

MATERIAL	CONDITION	W(Density)	
		Lbm/in ³	Lbm/ft ³
17-4 PH	H 1150	0.284	491

Theoretical stagnation point heat transfer rate was calculated using Fay and Riddell's equation:

$$\dot{q}_{ot} = 0.94 (\rho_w \mu_w)^{.5} (\rho_o \mu_o / \rho_w \mu_w)^{.4} (H_o - H_w) (du/dx)^{.5} \quad (2)$$

$$\text{where: } \mu_w = \frac{0.0232 \times 10^{-6} T^{.5}}{1 + (220/T)}$$

$$\text{and } \frac{du}{dx} = (1/rs) \left[2RT(1-P_\infty/P_o) \right]^{0.5}$$

Computed local heat transfer coefficient for each thermocouple is:

DATA REDUCTION (Continued)

$$h_{\text{local}} = \frac{\dot{q}}{r_{T_o} - T_w} \quad (3)$$

at $r = 1.0, .9, .85$

Computed ratio of local heat transfer coefficient to reference heat transfer coefficient is:

$$\frac{h_{\text{local}}}{h_{\text{ref}}} \quad (4)$$

$$\text{where } h_{\text{ref}} = \frac{\dot{q}_{\text{ot}}}{r_{T_o} - T_w}, \quad (r = 1.0)$$

The ratio of local heat transfer coefficient to reference heat transfer coefficient was computed at adiabatic wall temperature ratios of $r = .85, .90$, and 1.0 .

The Test OH45 tabulated data is in the following format:

<u>Symbol</u>	<u>Description</u>
<u>Tunnel data</u>	
ALPHA	Model angle of attack
MACH	Tunnel freestream Mach number
P0	Tunnel freestream static pressure (psia)
T0	Tunnel stagnation temperature ($^{\circ}\text{R}$)
H0	Tunnel stagnation enthalpy (BTU/lb)

DATA REDUCTION (Concluded)

<u>Symbol</u>	<u>Description</u>
<u>Thermocouple Data</u>	
Geometry	Thermocouple location
H/HREF	Ratio of local to stagnation point heat transfer coefficients for recovery factors of 0.85, 0.9 and 1.0

REFERENCES

- (1) Robert A. Jones and James L. Hunt, "Use of Tetrafluoromethane to Simulate Real-Gas Effects on the Hypersonic Aerodynamics of Blunt Vehicles", NASA TR R-312, March 12, 1969.
- (2) SD73-SH-0122, "Pretest Report for Heat-Transfer Tests on 0.00593-Scale Models of Rockwell International Space Shuttle Orbiters (46-Ø) in NASA's 18-Inch Variable Density Tunnel", May 18, 1973.

TABLE I. TEST OH45 OPERATING CONDITIONS

	<u>Nominal Mach Number</u>	<u>Nominal Reynolds Number</u>
1. Thin-Skin Data	6	$0.3 \times 10^6/\text{foot}$
	6	$0.5 \times 10^6/\text{foot}$
2. Oil-Flow Data	6	$0.5 \times 10^6/\text{foot}$
	6	$0.7 \times 10^6/\text{foot}$

[illegible]

TABLE III. MODEL 50-0 DIMENSIONAL DATA

MODEL COMPONENT : BODY - B₂₂

GENERAL DESCRIPTION : Fuselage, Configuration 3A per Rockwell
Lines VL70-000147B.

NOTE: Identical to B19, except underside.

MODEL SCALE: 0.006

DRAWING NUMBER: VL70-000147B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length - In.	<u>1290.3</u>	<u>7.742</u>
Max Width - In.	<u>267.6</u>	<u>1.606</u>
Max Depth - In.	<u>244.5</u>	<u>1.467</u>
Fineness Ratio	<u>4.84601</u>	<u>4.84601</u>
Area - Ft ²	<u></u>	<u></u>
Max. Cross-Sectional	<u>386.67</u>	<u>0.0139</u>
Planform	<u></u>	<u></u>
Wetted	<u></u>	<u></u>
Base	<u></u>	<u></u>

TABLE III. - CONTINUED

MODEL COMPONENT : CANOPY - C₇

GENERAL DESCRIPTION : Configuration 3 per Rockwell Lines VL70-000139

MODEL SCALE: 0.006

DRAWING NUMBER : VL70-000139

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ($X_0 = 433$ to $X_0 = 578$)-In.FS	<u>145.</u>	<u>0.870</u>
Max Width	<u> </u>	<u> </u>
Max Depth	<u> </u>	<u> </u>
Fineness Ratio	<u> </u>	<u> </u>
Area	<u> </u>	<u> </u>
Max. Cross--Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III. - CONTINUED

MODEL COMPONENT : BODY FLAP - F5

GENERAL DESCRIPTION : 3 Configuration per Rockwell Lines VL70-000139

MODEL SCALE: 0.006

DRAWING NUMBER : VL70-000139

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length - In.	<u>84.70</u>	<u>0.508</u>
Max Width - In.	<u>267.6</u>	<u>1.606</u>
Max Depth	<u></u>	<u></u>
Fineness Ratio	<u></u>	<u></u>
Area - Ft ²	<u></u>	<u></u>
Max. Cross-Sectional	<u></u>	<u></u>
Planform	<u>142.5</u>	<u>0.005</u>
Wetted	<u></u>	<u></u>
Base	<u>38.0958</u>	<u>0.001368</u>

TABLE III. - CONTINUED

MODEL COMPONENT : OMS POD - M₄

GENERAL DESCRIPTION : Configuration 3 per Rockwell Lines VL70-000139

NOTE: M₄ identical to M₃, except intersection to fuselage.

MODEL SCALE: 0.006

DRAWING NUMBER: VL70-000139

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length - In.	<u>346.0</u>	<u>2.076</u>
Max Width - In.	<u>108.0</u>	<u>0.648</u>
Max Depth - In.	<u>113.0</u>	<u>0.678</u>
Fineness Ratio	<u> </u>	<u> </u>
Area	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE III. - CONTINUED

MODEL COMPONENT: VERTICAL - V₇GENERAL DESCRIPTION: Centerline vertical tail, double-wedge airfoil
with rounded leading edge.MODEL SCALE: 0.006DRAWING NUMBER: VL70-000139

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
TOTAL DATA		
Area (Theo) - Ft ²		
Planform	<u>425.92</u>	<u>0.0153</u>
Span (Theo) - In.	<u>315.72</u>	<u>1.894</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>0.404</u>	<u>0.404</u>
Sweep-Back Angles - Deg.		
Leading Edge	<u>45.000</u>	<u>45.000</u>
Trailing Edge	<u>26.249</u>	<u>26.249</u>
0.25 Element Line	<u>41.130</u>	<u>41.130</u>
Chords:		
Root (Theo) WP	<u>268.50</u>	<u>1.611</u>
Tip (Theo) WP	<u>108.47</u>	<u>0.651</u>
MAC	<u>199.81</u>	<u>1.199</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>8.781</u>
W.P. of .25 MAC	<u>635.522</u>	<u>3.813</u>
B.L. of .25 MAC	<u>0.00</u>	<u>0.00</u>
Airfoil Section		
Leading Wedge Angle - Deg.	<u>10.000</u>	<u>10.000</u>
Trailing Wedge Angle - Deg.	<u>14.920</u>	<u>14.920</u>
Leading Edge Radius	<u>2.00</u>	<u>2.00</u>
Void Area	<u>13.17</u>	<u>0.005</u>
Blanketed Area	<u>0.00</u>	<u>0.00</u>

TABLE III. - CONCLUDED

MODEL COMPONENT: WING-W₁₁₁GENERAL DESCRIPTION: Configuration 3A per Rockwell Lines VL70-000147B.

NOTE: Identical to W107, except lowered 3.5" and increased cuff incidence.

MODEL SCALE: 0.006

TEST NO.DWG. NO. VL70-000147BDIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATAArea (Theo.) - Ft^2

Planform

Span (Theo In.

Aspect Ratio

Rate of Taper

Taper Ratio

Dihedral Angle, degrees

Incidence Angle, degrees

Aerodynamic Twist, degrees

Sweep Back Angles, degrees

Leading Edge

Trailing Edge

0.25 Element Line

Chords:

Root (Theo) B.P.O.O.

Tip, (Theo) B.P.

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

EXPOSED DATAArea (Theo) - Ft^2

Span, (Theo) In. BP108

Aspect Ratio

Taper Ratio

Chords

Root BP108

Tip $1.00 \frac{b}{2}$

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

Airfoil Section (Rockwell Mod NASA)

XXXX-64

Root $\frac{b}{2} =$ Tip $\frac{b}{2} =$

Data for (1) of (2) Sides

Leading Edge Cuff

Planform Area Ft^2

Leading Edge Intersects Fus M. L. @ Sta

Leading Edge Intersects Wing @ Sta

TABLE IV. - MODEL 46-0, CONFIGURATION #4 DIMENSIONAL DATA

MODEL COMPONENT : BODY - B₁₇

GENERAL DESCRIPTION : Basic fuselage for models 46-1, -2, -3, -4.

MODEL SCALE: 0.00593

DRAWING NUMBER : VL70-000139

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length - In.	<u>1290.3</u>	<u>7.65148</u>
Max Width - In.	<u>267.6</u>	<u>1.58687</u>
Max Depth - In.	<u>244.5</u>	<u>1.44988</u>
Fineness Ratio	<u>4.82175</u>	<u>4.82175</u>
Area - Ft ²	<u> </u>	<u> </u>
Max. Cross-Sectional	<u>386.67</u>	<u>0.01360</u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

TABLE IV. - CONTINUED

MODEL COMPONENT : CANOPY - C7

GENERAL DESCRIPTION : Configuration 3 per Rockwell Lines VL70-000139

MODEL SCALE: .00593

DRAWING NUMBER VL70-000139

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X = 433 to X = 578)-IN.F.S. 145.0	<u>145.0</u>	<u>0.860</u>
Max Width	_____	_____
Max Depth	_____	_____
Fineness Ratio	_____	_____
Area	_____	_____
Max. Cross-Sectional	_____	_____
Planform	_____	_____
Wetted	_____	_____
Base	_____	_____

TABLE IV. - CONTINUED

MODEL COMPONENT : BODY FLAP - F₅

GENERAL DESCRIPTION : Body flap located on the lower aft end of the orbiter fuselage.

MODEL SCALE: 0.00593

DRAWING NUMBER : VL70-000139

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length - In.	<u>84.70</u>	<u>0.50227</u>
Max Width - In.	<u>267.6</u>	<u>1.58687</u>
Max Depth	<u> </u>	<u> </u>
Fineness Ratio	<u> </u>	<u> </u>
Area - Ft ²	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u>142.5195</u>	<u>0.00501</u>
Wetted	<u> </u>	<u> </u>
Base	<u>38.0958</u>	<u>0.00134</u>

TABLE IV. - CONTINUED

MODEL COMPONENT : OMS POD- M₄

GENERAL DESCRIPTION : OMS PODS located on the aft orbiter fuselage.

MODEL SCALE: 0.00593

DRAWING NUMBER : VI70-000139

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length - In.	<u>346.0</u>	<u>2.05178</u>
Max Width - In.	<u>108.0</u>	<u>0.64044</u>
Max Depth - In.	<u>113.0</u>	<u>113.0</u>
Fineness Ratio	<u> </u>	<u> </u>
Area	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u> </u>	<u> </u>
Wetted	<u> </u>	<u> </u>
Base	<u> </u>	<u> </u>

C of OMS Pod

WP = 463.9 in F.S.: WP 400 + 63.9 = 463.9

BP = 80.00 in. F.S.

Length 1214.0 to 1560.0 = 346.0 in.F.S.

NOTE: M₄ identical to M₃ of 2A configuration except intersection to body

TABLE IV. - CONTINUED

MODEL COMPONENT: VERTICAL - V₇ - Lightweight orbiter configuration

GENERAL DESCRIPTION: Centerline vertical tail, double-wedge airfoil
with rounded leading edge.

MODEL SCALE: 0.00593

DRAWING NUMBER: VL70-000139, VL70-000095

DIMENSIONS:

FULL SCALE

MODEL SCALE

TOTAL DATA

Area (Theo) - Ft²
 Planform
 Span, (theo.) - In.
 Aspect Ratio
 Rate of Taper
 Taper Ratio

425.92
315.72
1.675
0.507
0.404

0.01498
1.87222
1.675
0.507
0.404

Sweep-back Angles - Deg.
 Leading Edge
 Trailing Edge
 0.25 Element Line

45.000
26.249
41.130

45.000
26.249
41.130

Chords:

Root, (Theo) WP
 Tip (Theo) WP
 MAC
 Fus. Sta. of 0.25 MAC
 W.P. of 0.25 MAC
 B.L. of 0.25 MAC

268.50
108.47
199.81
1463.50
635.522
0.0

1.59220
0.64323
1.18487
8.67856
3.76864
0.0

Airfoil Section

Leading Wedge Angle, Deg.
 Trailing Wedge Angle, Deg.
 Leading Edge Radius - In.

10.000
14.920
2.00

10.000
14.920
2.00

Void Area

13.13

0.00046

Blanketed Area

TABLE IV. - CONCLUDED

MODEL COMPONENT: WING-W₁₀₄ - New lightweight orbiter (modified)

GENERAL DESCRIPTION: Orbiter wing for Model 46-4. NOTE: Dihedral angle is defined at the lower surface of the wing at the 75.33% element line projected into a plane perpendicular to the FRL. Underside of the wing-body is smoothly faired to a saucer shape.

MODEL SCALE: 0.00593

TEST NO.

DWG. NO. VL70-000139A

DIMENSIONS:

FULL-SCALE

MODEL SCALE

TOTAL DATA

Area (Theo.) - Ft²

Planform

2690.000.09459

Span (Theo In.

936.685.55451

Aspect Ratio

2.2652.265

Rate of Taper

1.1771.177

Taper Ratio

0.2000.200

Dihedral Angle, degrees

3.5003.500

Incidence Angle, degrees

3.0003.000

Aerodynamic Twist, degrees

+ 3.000+ 3.000

Sweep Back Angles, degrees

Leading Edge

45.00045.000

Trailing Edge

- 10.24- 10.24

0.25 Element Line

35.20935.209

Chords:

Root (Theo) B.P.O.O.

689.244.08719

Tip, (Theo) B.P.

137.850.81745

MAC

474.812.81562

Fus. Sta. of .25 MAC

1136.896.74176

W.P. of .25 MAC

299.201.77426

B.L. of .25 MAC

182.131.08003

EXPOSED DATA

Area (Theo) - Ft²1752.290.06162

Span, (Theo) In. BP108

720.684.27363

Aspect Ratio

2.0582.058

Taper Ratio

0.24510.2451

Chords

Root BP108

562.403.33503Tip 1.00 $\frac{b}{2}$ 137.850.81745

MAC

393.032.33067

Fus. Sta. of .25 MAC

1185.317.02889

W.P. of .25 MAC

300.201.78019

B.L. of .25 MAC

143.760.85250Airfoil Section (Rockwell Mod NASA)
XXXX-64Root $\frac{b}{2}$ =0.120.12Tip $\frac{b}{2}$ =0.120.12

Data for (1) of (2) Sides

Leading Edge Cuff

Planform Area - Ft²120.330.00423

Leading Edge Intersects Fus M. L. @ Sta

560.03.32080

Leading Edge Intersects Wing @ Sta

1035.06.13755

TABLE V. - ORBITER THERMOCOUPLE LOCATIONS

T/C NO.	SKIN THICKNESS	LOCATION		MODEL PART	T/C NO.	SKIN THICK	LOCATION			MODEL PART
		DIST FROM X ₀ = 238.0	X/L				DIST FR L-E	% CHORD	b 2	
1	.035	.194	.025	Underside Fuselage						
2	.035	.387	.05							
3	.035	.581	.075							
4	.034	.774	.10							
5	.033	.968	.125							
6	.033	1.161	.150							
7	.034	1.355	.175							
8	.034	1.548	.20							
9	.035	1.935	.25							
10	.035	2.323	.30							
11	.035	2.710	.35							
12	.034	3.097	.40							
13	.034	3.484	.45							
14	.035	3.871	.50							
15	.035	4.258	.55							
16	.035	4.645	.60							
17	.035	5.032	.65							
18	.035	5.419	.70							
19	.035	5.806	.75							
20	.035	6.193	.80							
21	.035	6.581	.85							
22	.035	6.968	.90							
23	.036	7.355	.95							
24	.036	7.742	1.00							
25	.036	8.051	1.04							
26	.030	2.710	.35	Underside Fus. BP117						
27	.027	3.097	.40							
28	.027	3.871	.50							
29	.027	4.645	.60							
30	.027	5.419	.70							
31	.028	6.193	.80							
32	.031	6.968	.90							
33	.036	7.742	1.00							

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TABLE V. - CONCLUDED

[illegible]

TABLE VI. - MODEL 50-0 THERMOCOUPLE GROUPS

Group A

T/C 1-25

T/C 26-33

T/C 50-52

T/C 74-77

Group B

T/C 34-49

T/C 53-73

T/C 74-77

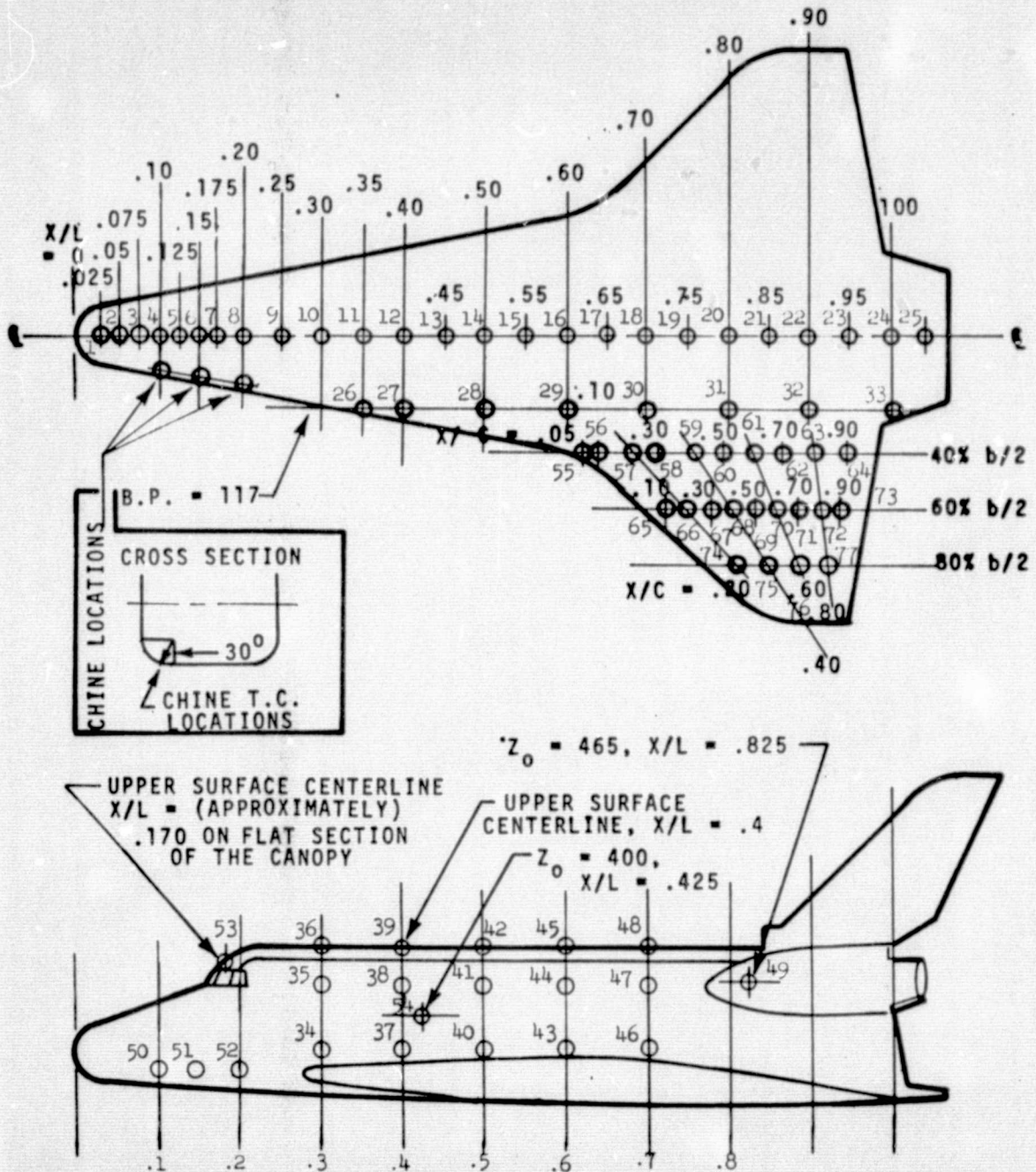
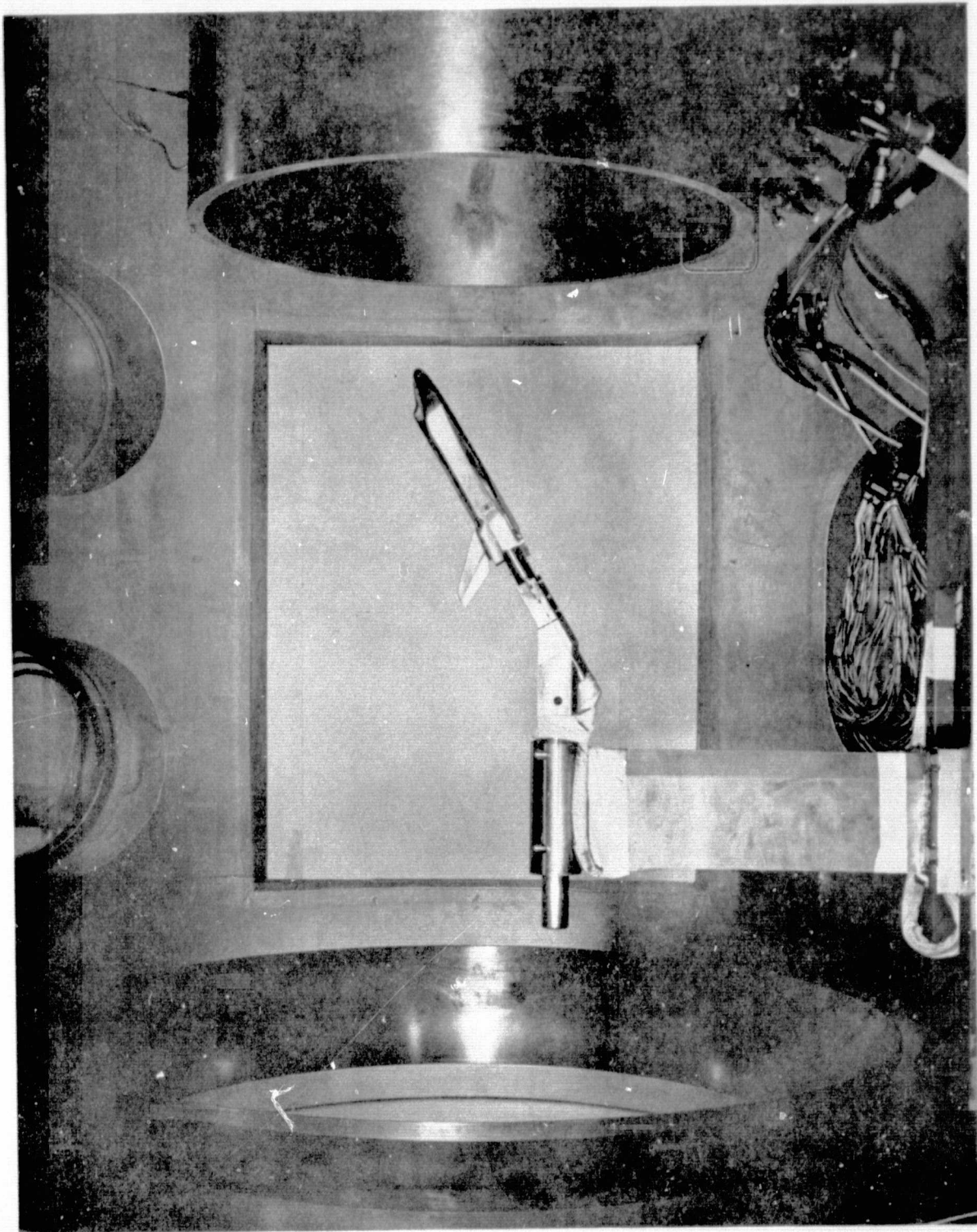
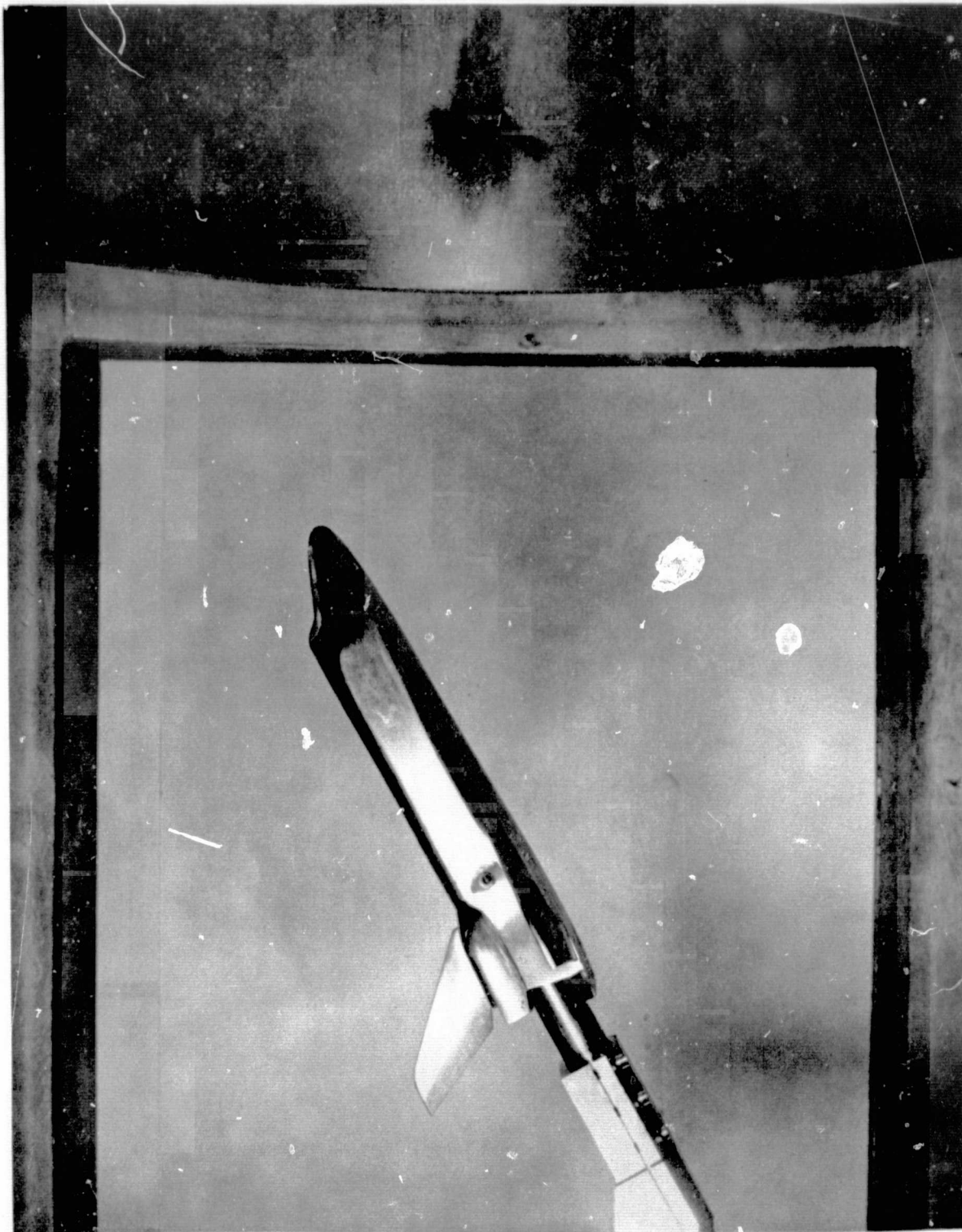


Figure 1. - 50-0 Orbiter Thermocouple Locations



2(a). Model 50-0 in the NASA LRC/CF₄ Tunnel

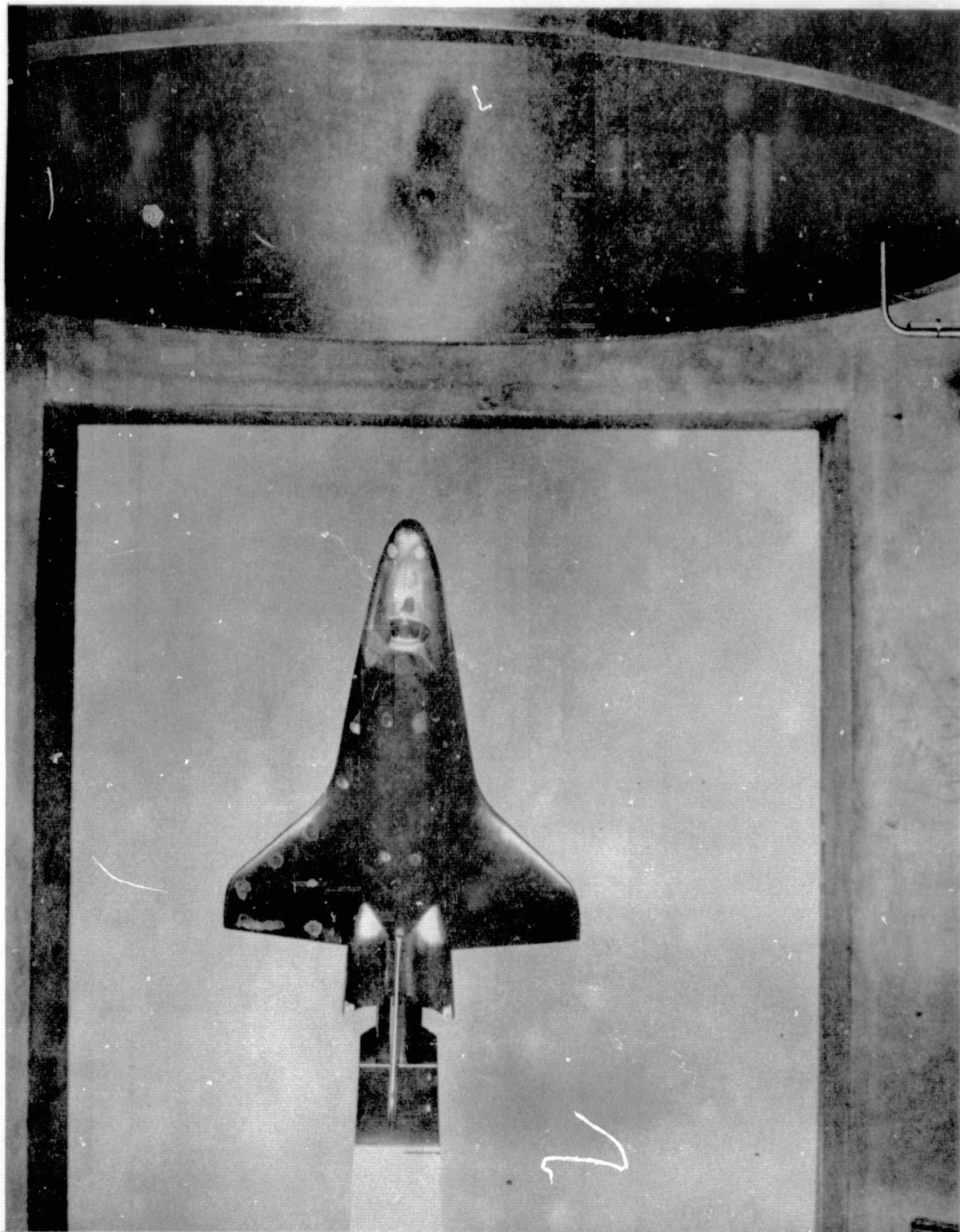
Figure 2. - Model Photographs



2(b). Model 50-0 in the NASA LRC/CF₄ Tunnel

Figure 2. - Continued

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2(c). Model 50-0 in the NASA LRC/CF₄ Tunnel

Figure 2. - Concluded

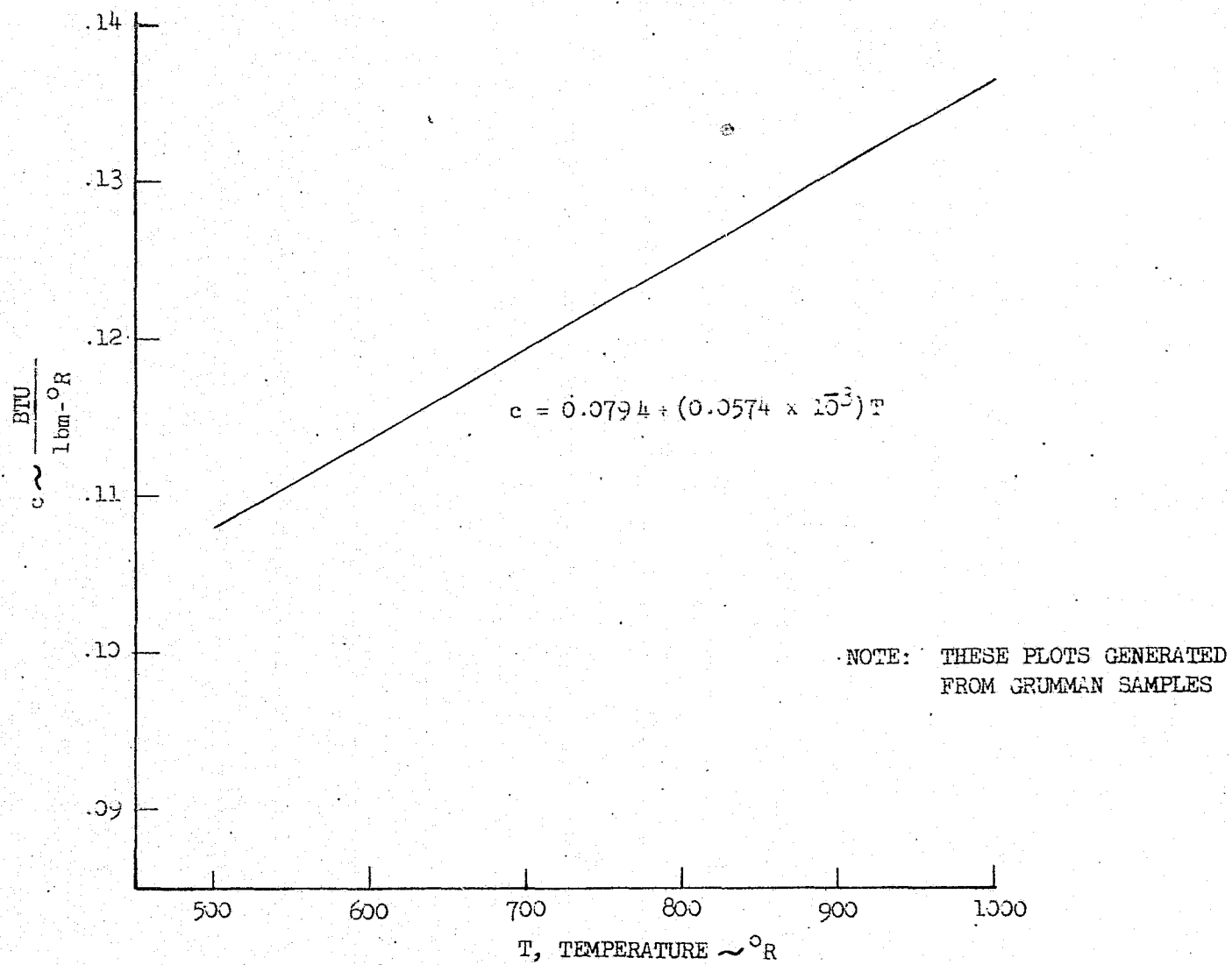


Figure 3. - Specific Heat vs. Temperature for 17-4 PH Stainless Steel

DATA FIGURES

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0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE(RQSB01)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	.850	2.956
□	117.000		

PARAMETRIC VALUES			
ALPHA	25.000	BETA	.000
MACH	6.000	ALPHAS	25.000
PHI	.000	PHIS	.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

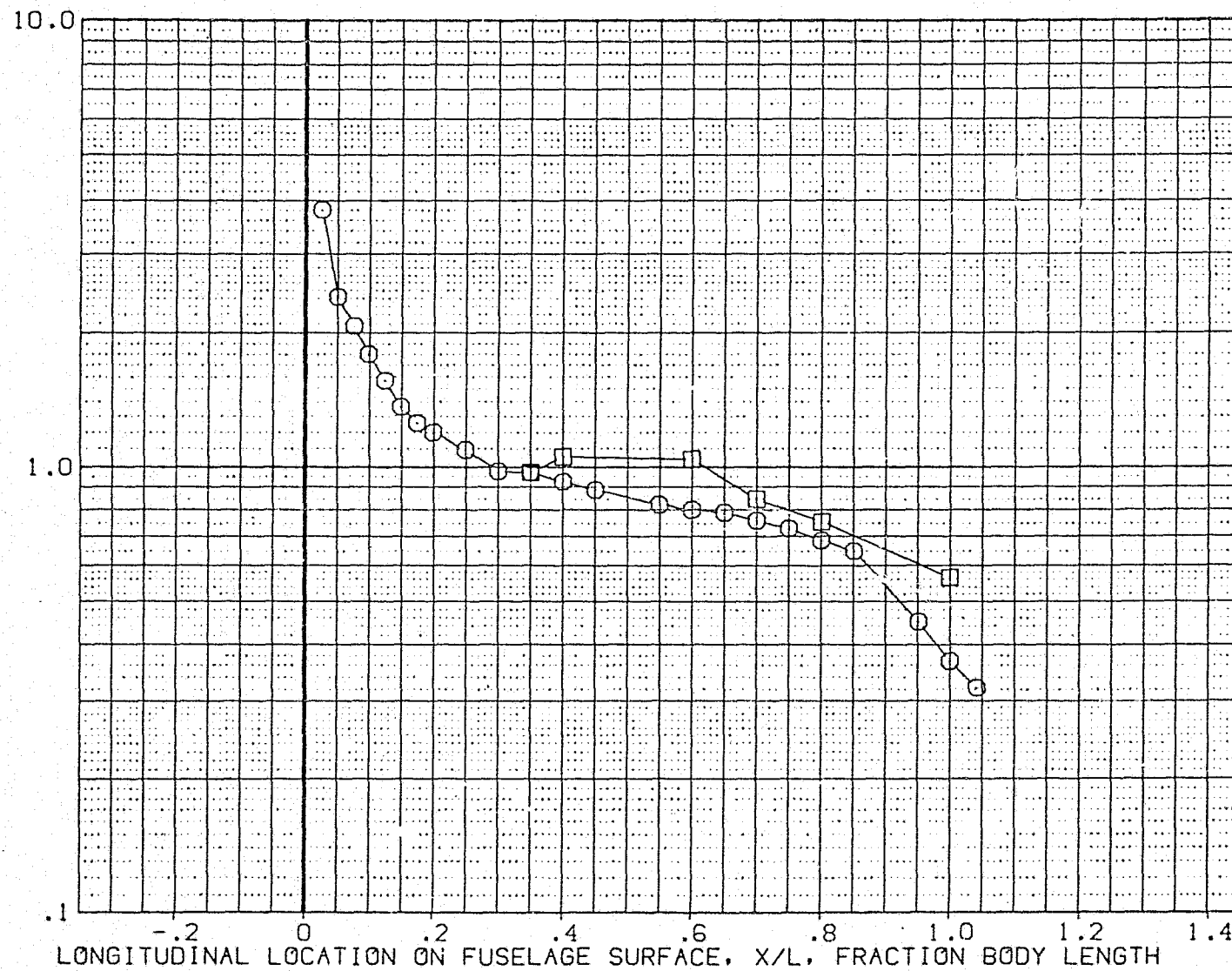


FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB01)

SYMBOL

Y(BP)

HAW/HT

RN/L

PARAMETRIC VALUES

○
□.000
117.000

.900

2.956

ALPHA

25.000

BETA

.000

MACH

6.000

ALPHAS

25.000

PHI

.000

PHIS

.000

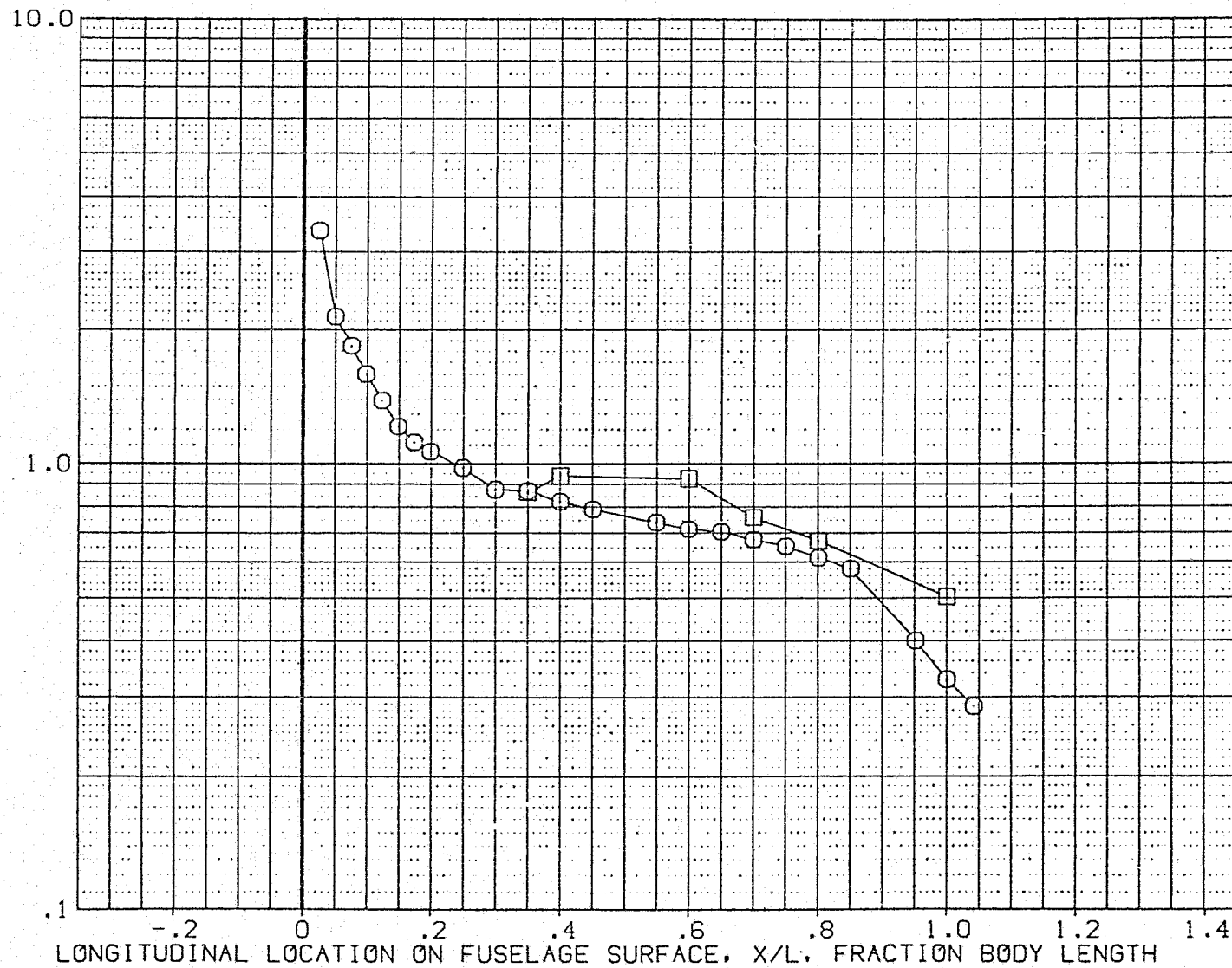
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FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE(RQSB01)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	1.000	2.956
□	117.000		

PARAMETRIC VALUES			
ALPHA	25.000	BETA	.000
MACH	6.000	ALPHAS	25.000
PHI	.000	PHIS	.000

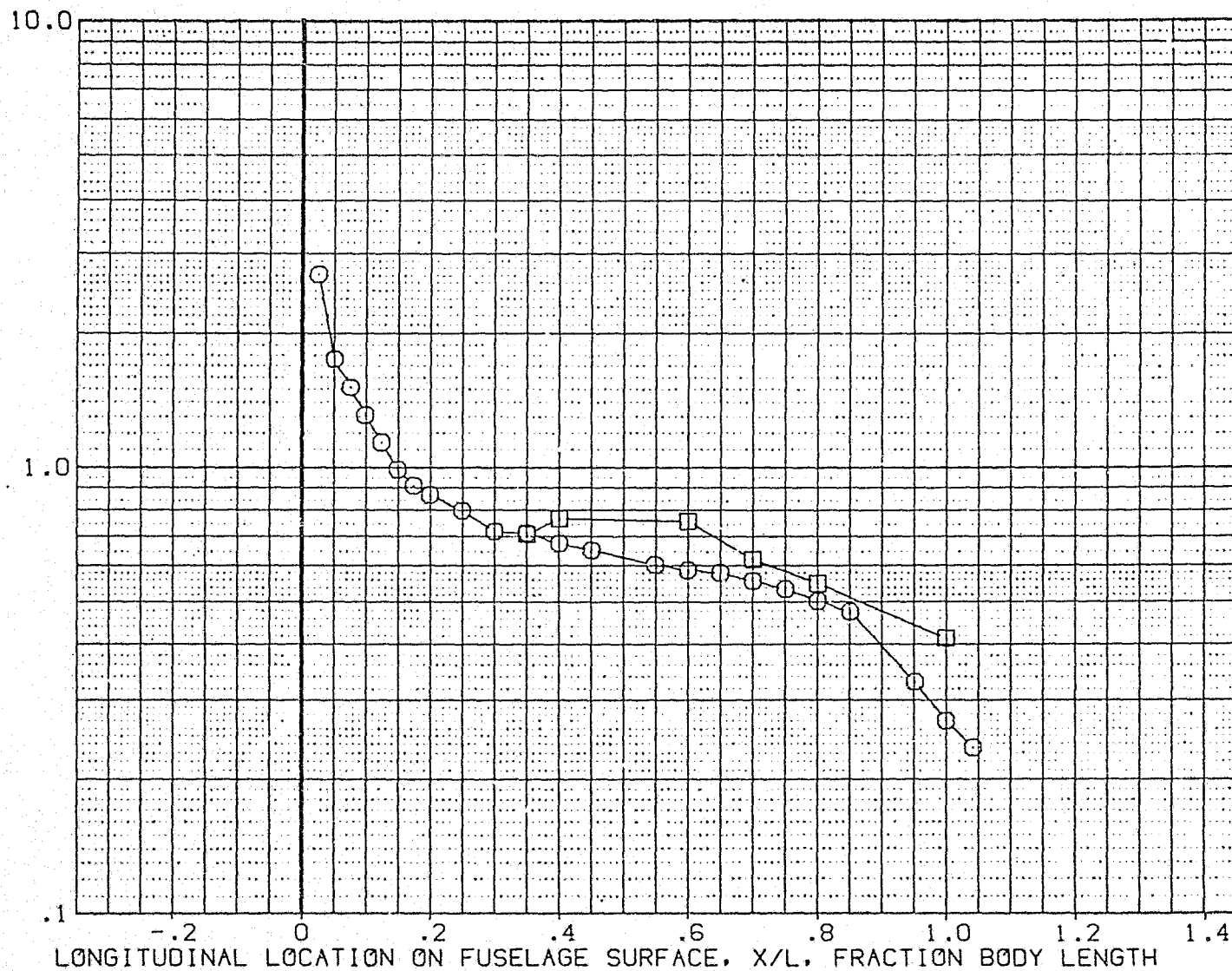
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FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB03)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	.850	3.149
□	117.000		

PARAMETRIC VALUES			
ALPHA	35.000	BETA	.000
MACH	6.000	ALPHAS	35.000
PHI	.000	PHIS	.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

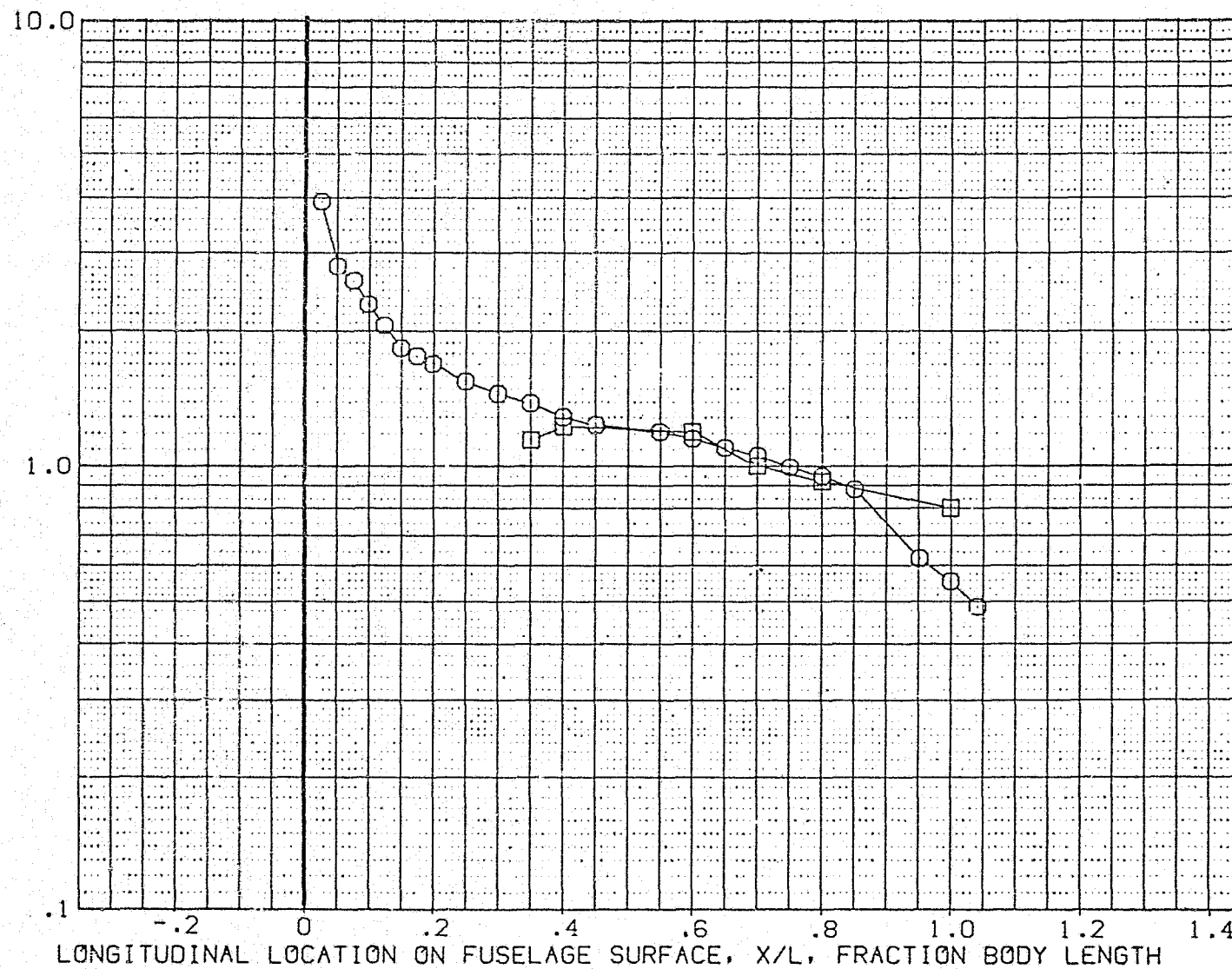


FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0445

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB03)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	.900	3.149
□	117.000		

PARAMETRIC VALUES			
ALPHA	35.000	BETA	.000
MACH	6.000	ALPHAS	35.000
PHI	.000	PHIS	.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

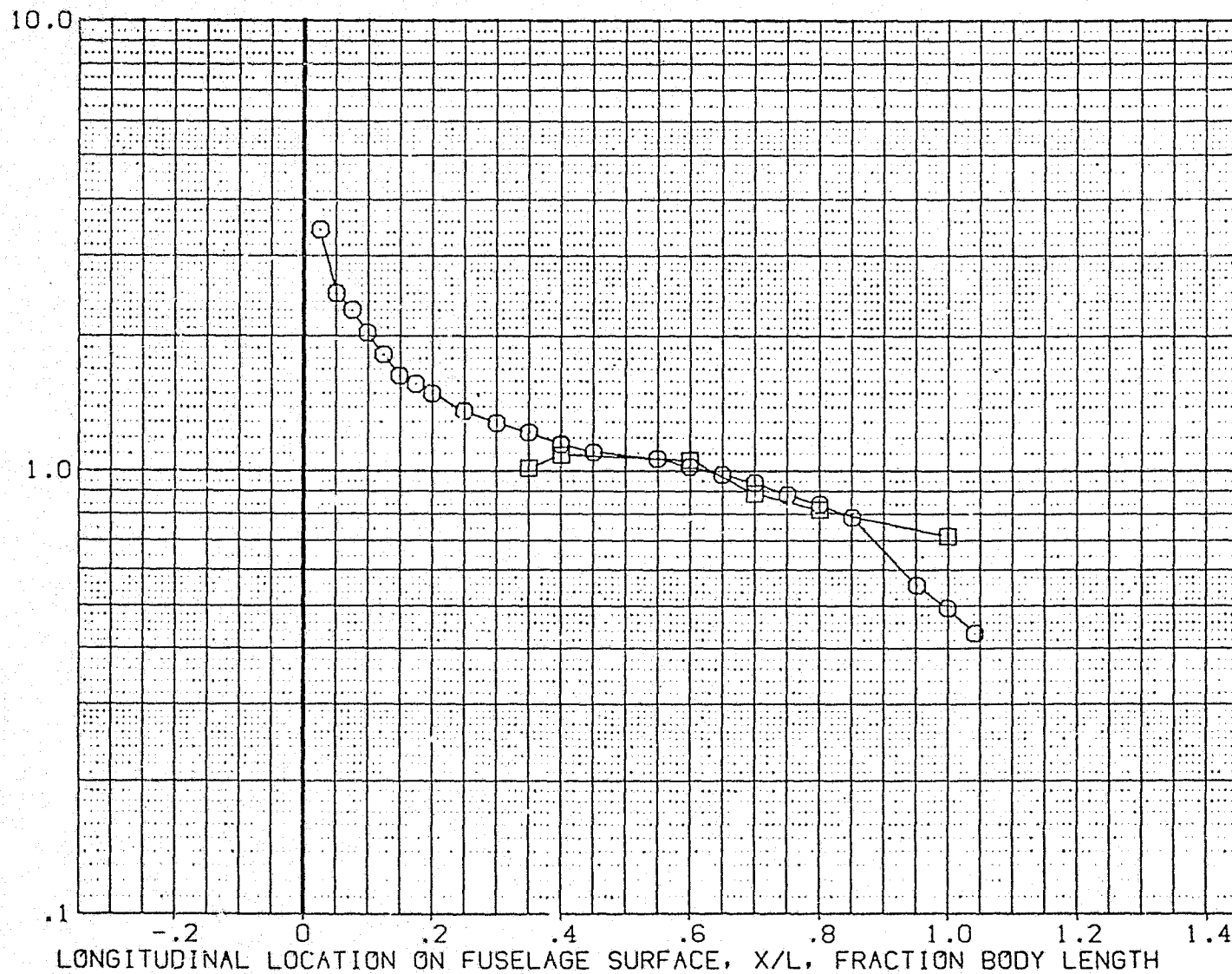


FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB03)

SYMBOL

Y(BF)

HAW/HT

RN/L

PARAMETRIC VALUES

○

.000
117.000

1.000

3.149

ALPHA

35.000

BETA

.000

MACH

6.000

ALPHAS

35.000

PHI

.000

PHIS

.000

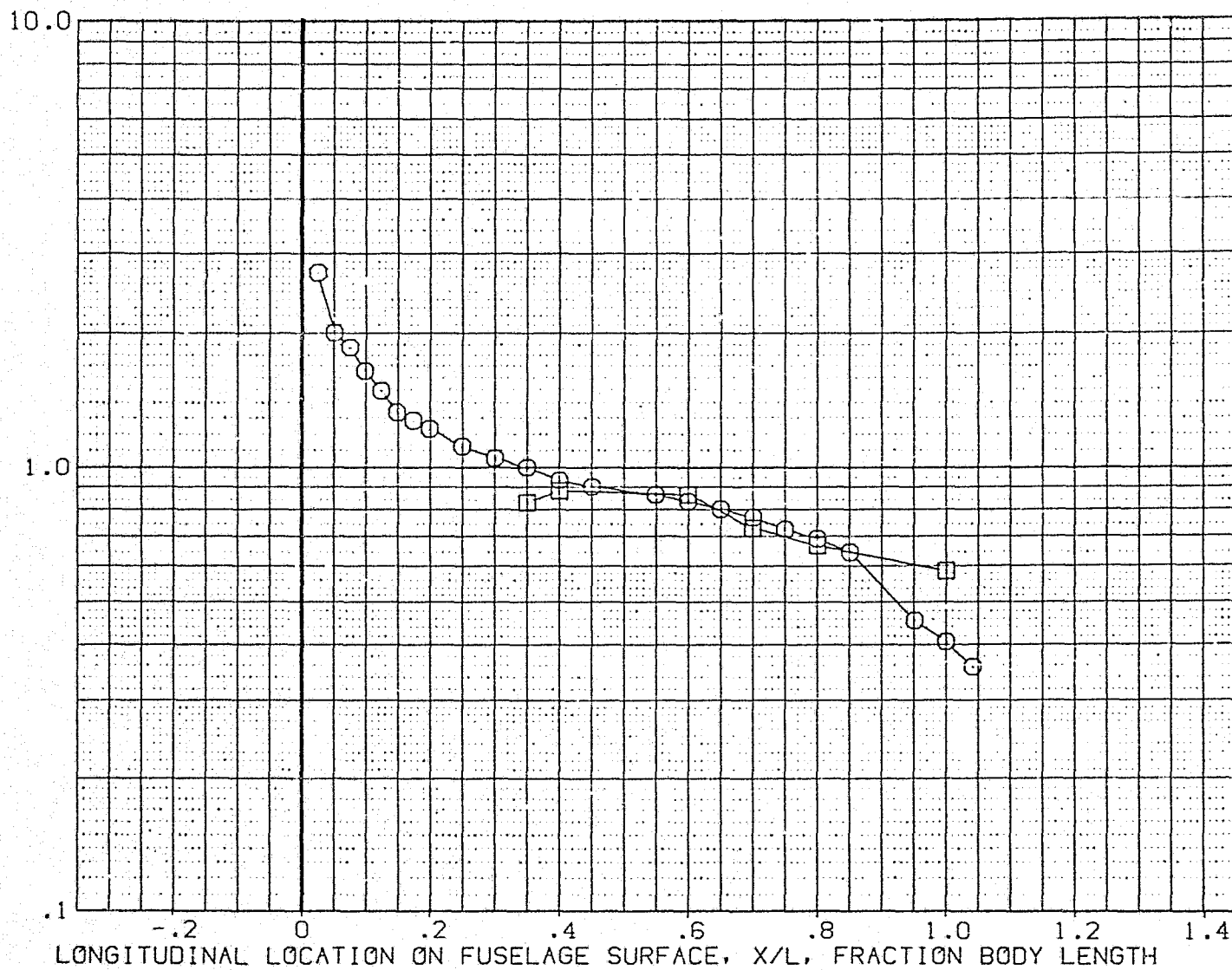
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FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB05)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	.850	2.951
□	117.000		

PARAMETRIC VALUES			
ALPHA	30.000	BETA	.000
MACH	6.000	ALPHAS	30.000
PHI	.000	PHIS	.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

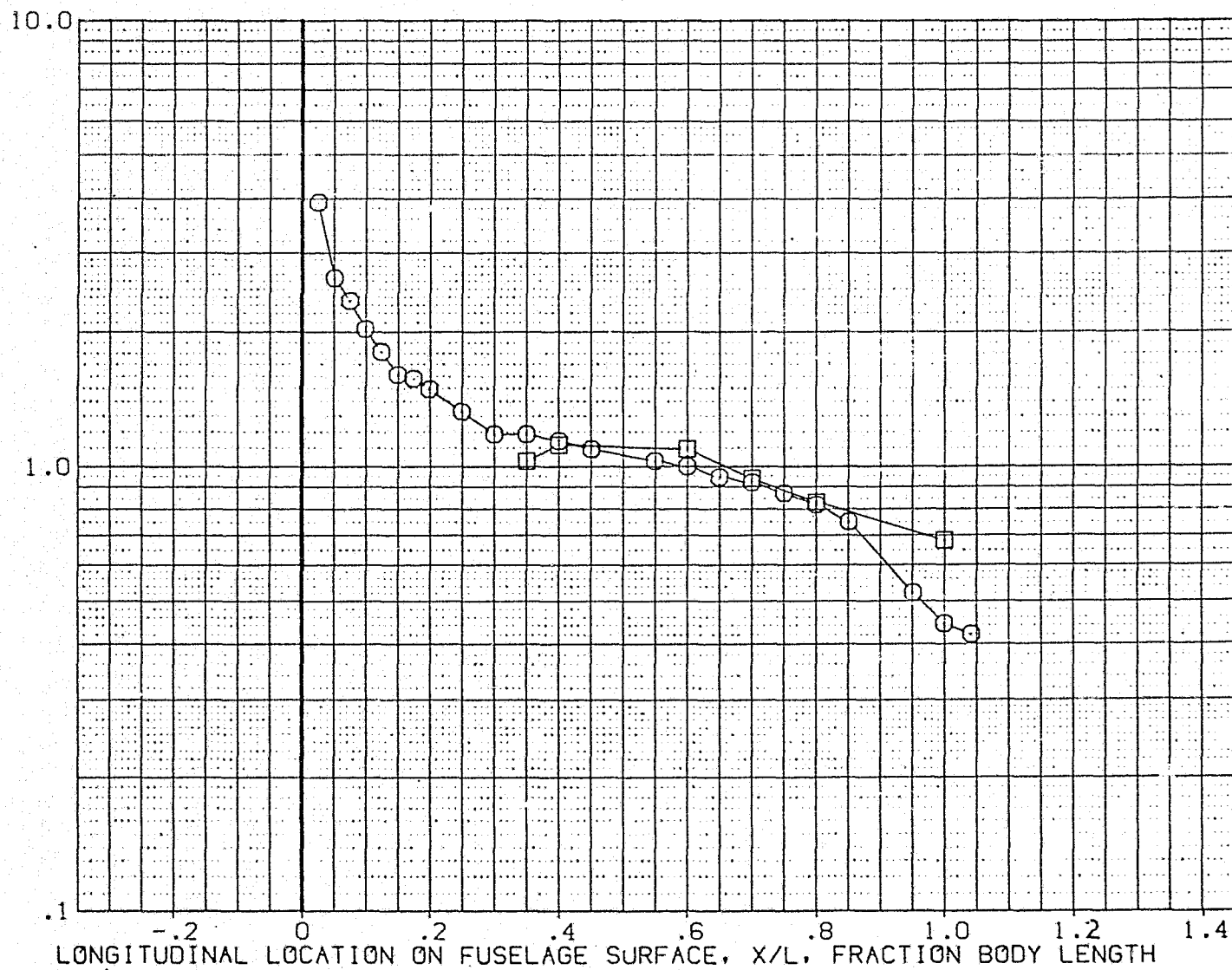


FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB05)

SYMBOL

Y(BP)

HAW/HT

RN/L

PARAMETRIC VALUES

○

.000

.900

2.951

ALPHA

30.000

BETA

.000

□

117.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

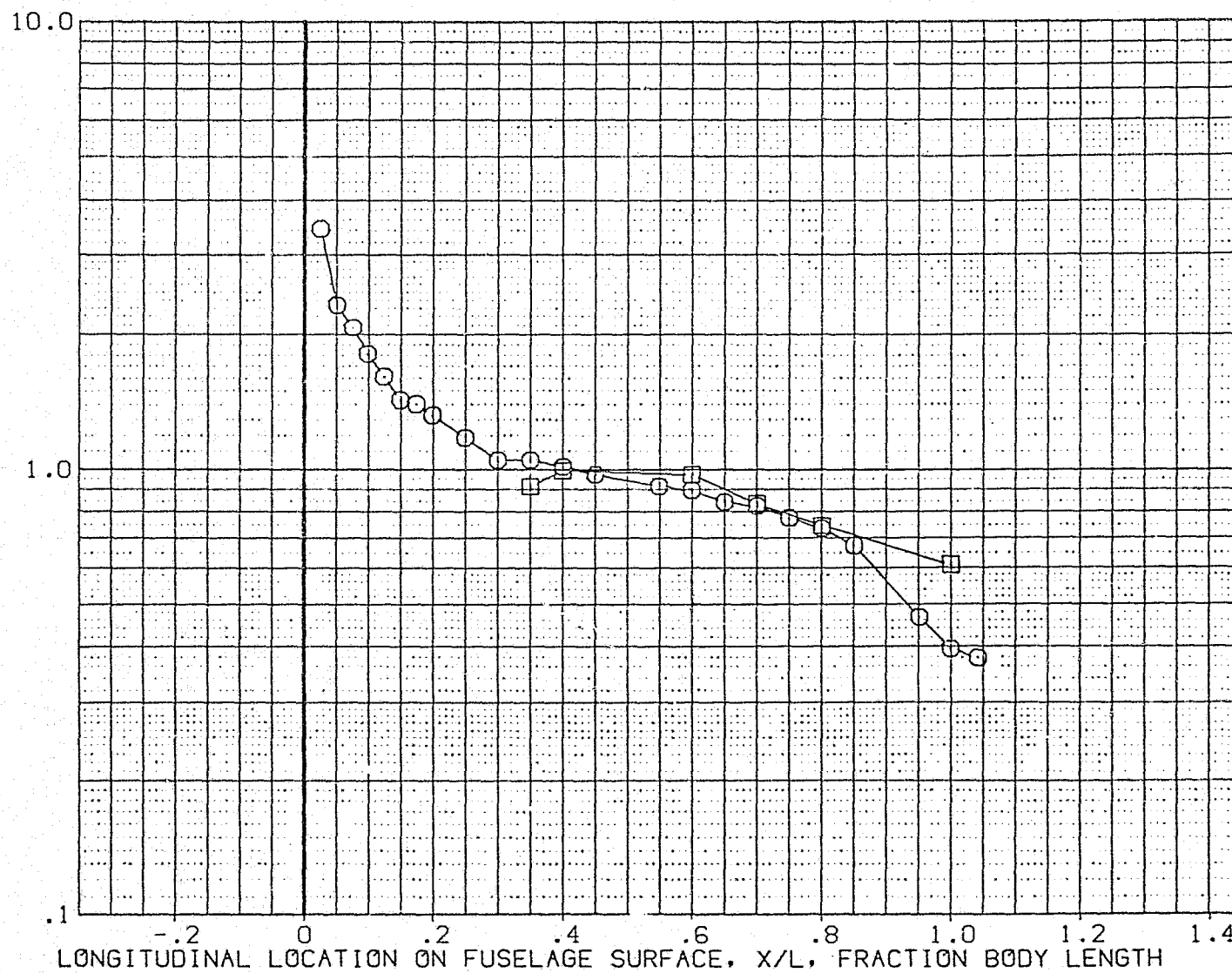
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB05)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	1.000	2.951
□	117.000		

PARAMETRIC VALUES			
ALPHA	30.000	BETA	.000
MACH	6.000	ALPHAS	30.000
PHI	.000	PHIS	.000

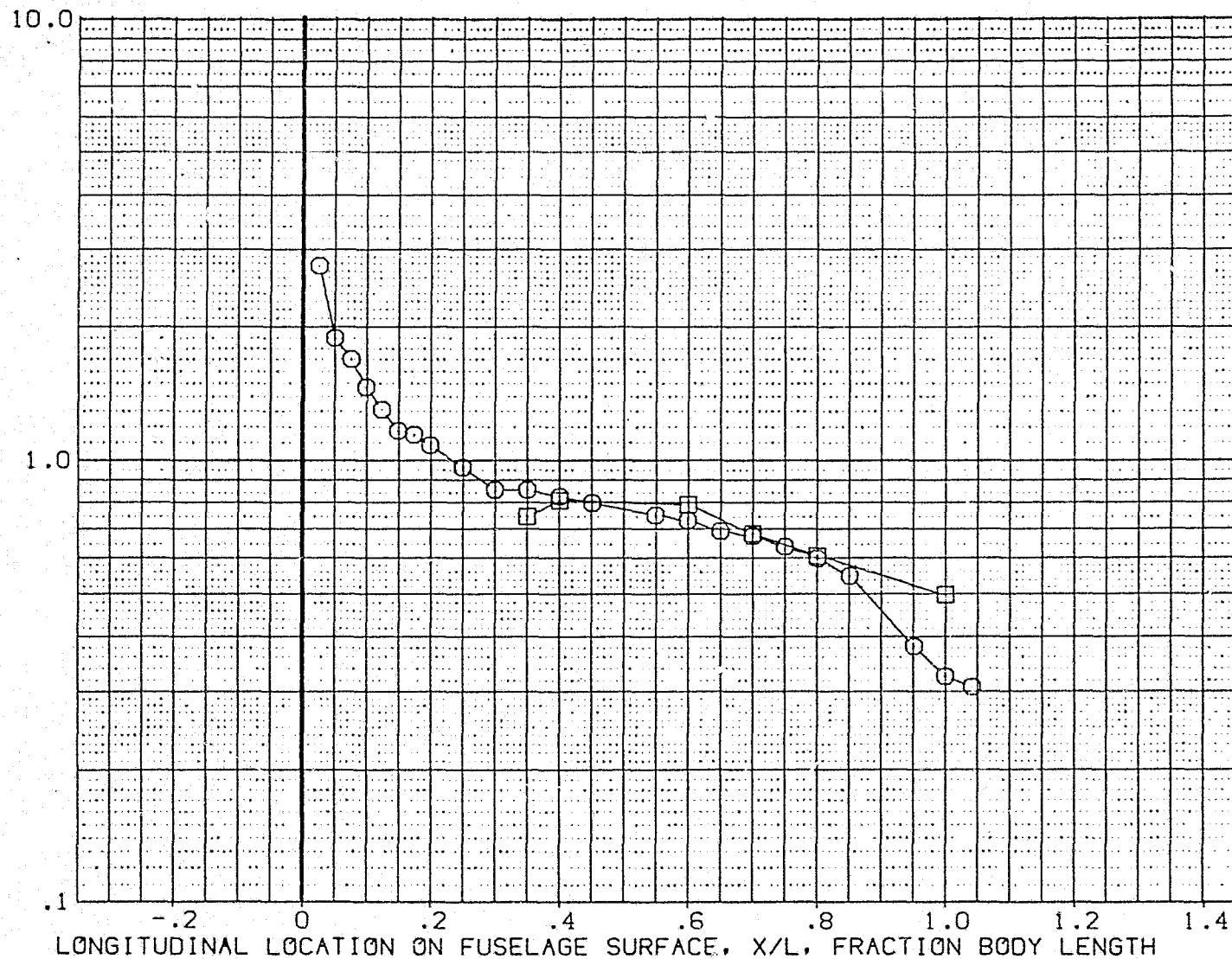
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB05)

SYMBOL

Y(BP)

HAW/HT

RN/L

PARAMETRIC VALUES

○
□.000
117.000

.850

5.284

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

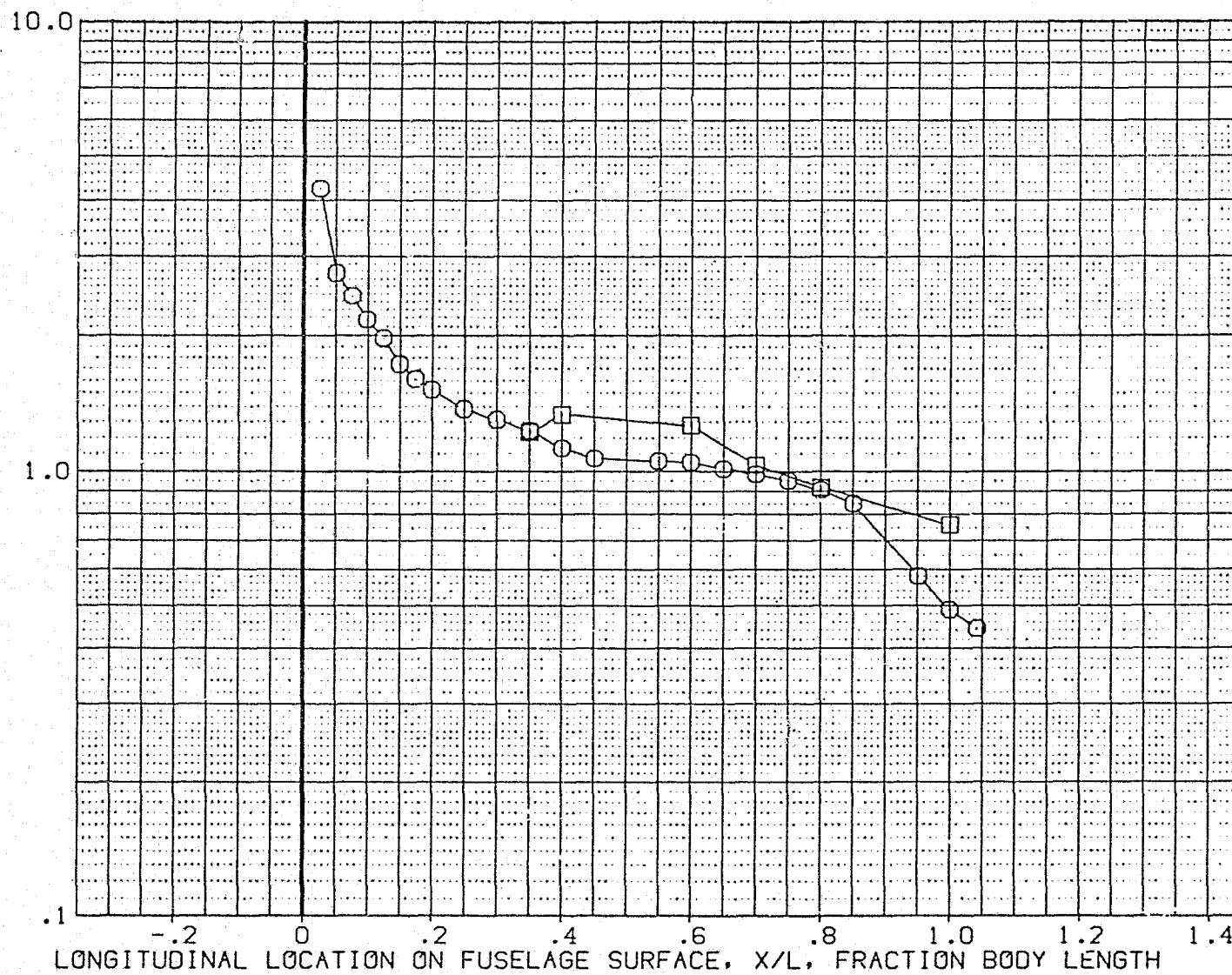
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB05)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	.900	5.284
□	117.000		

PARAMETRIC VALUES			
ALPHA	30.000	BETA	.000
MACH	6.000	ALPHAS	30.000
PHI	.000	PHIS	.000

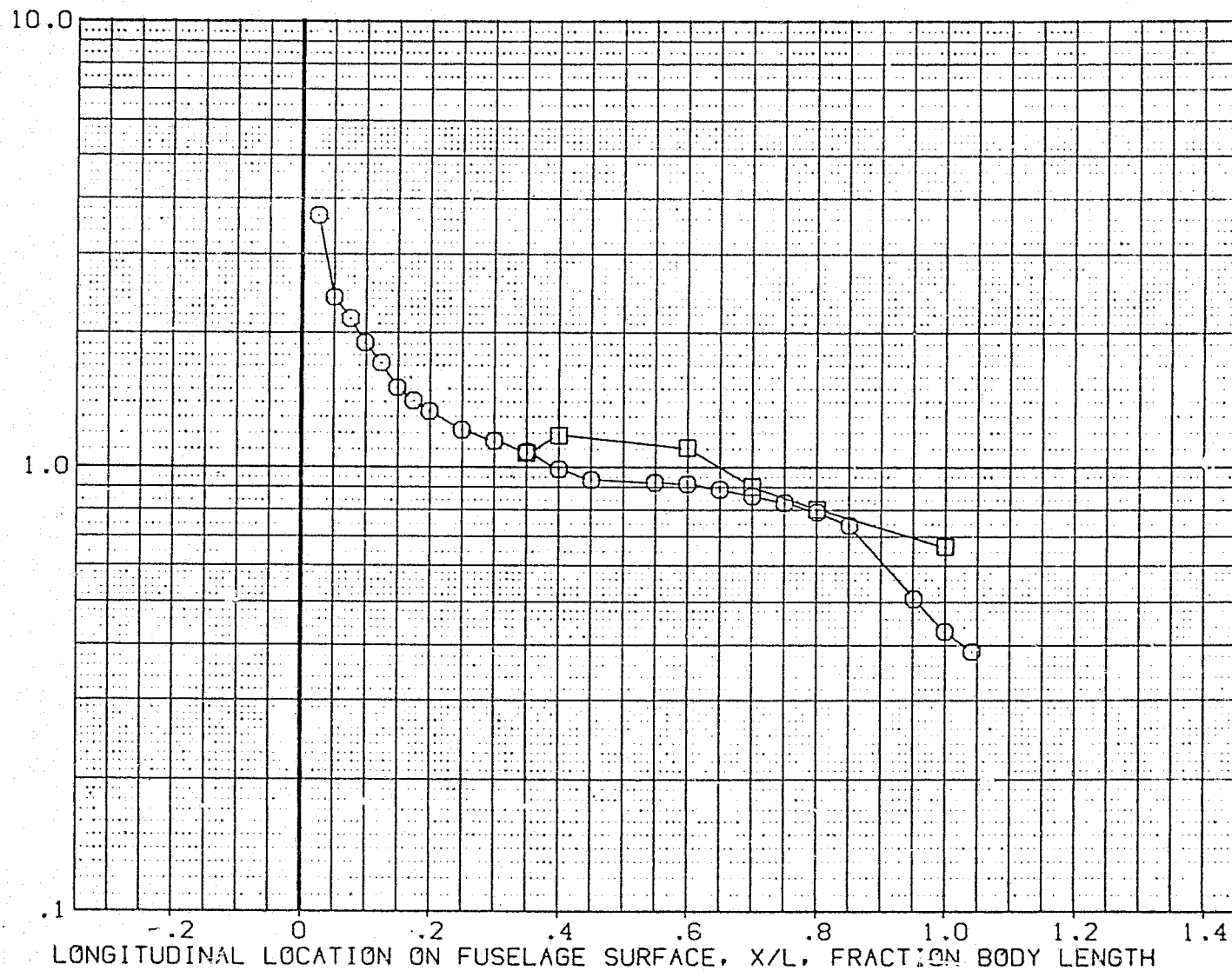
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB05)

SYMBOL

Y(BP)

HAW/HT

RN/L

PARAMETRIC VALUES

○

.000

1.000

5.284

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

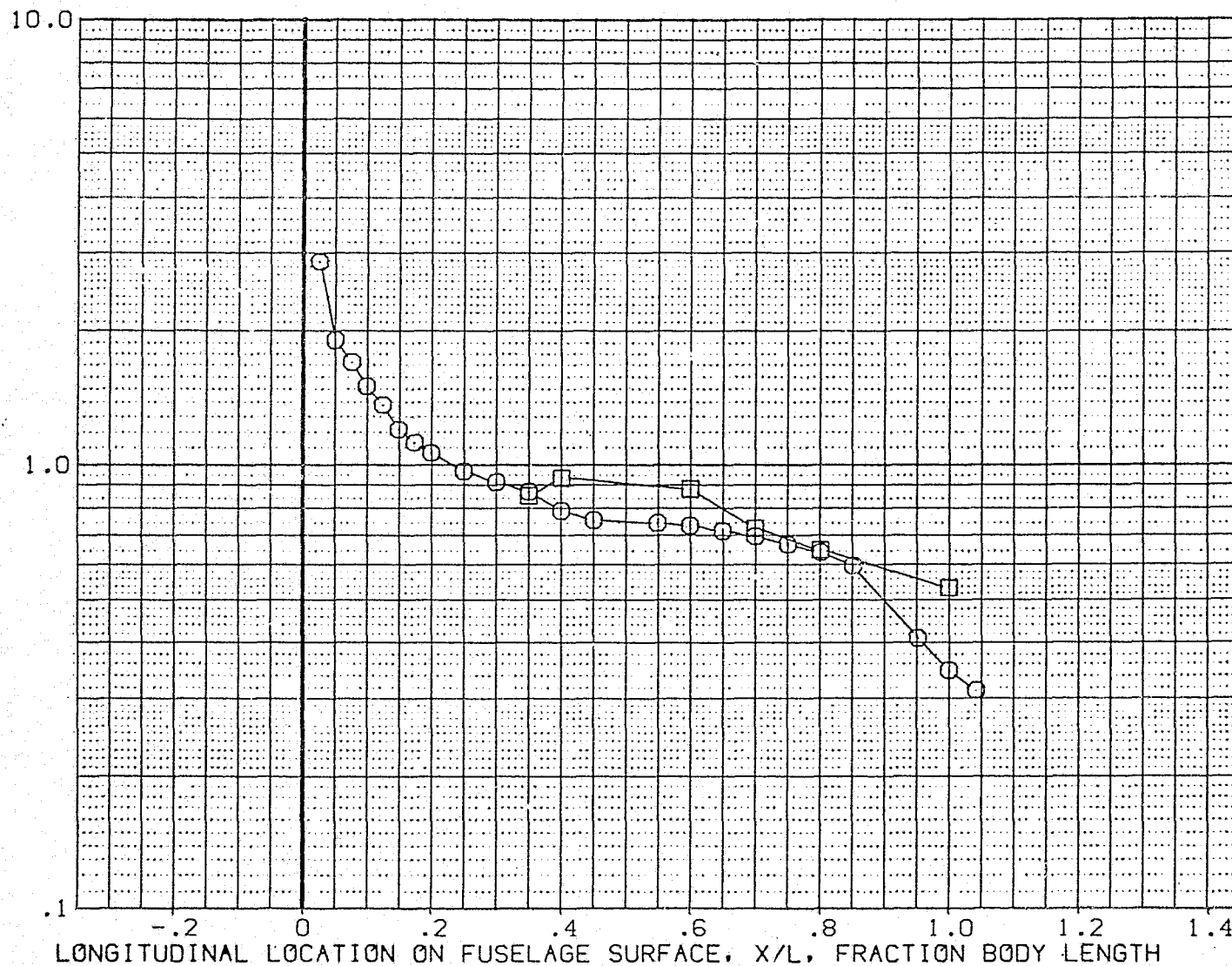
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB07)

SYMBOL Y(BP) HAW/HT RN/L
 ○ .000 .850 3.121
 □ 117.000

PARAMETRIC VALUES
 ALPHA 30.000 BETA 1.000
 MACH 6.000 ALPHAS 30.000
 PHI -2.000 PHIS .000

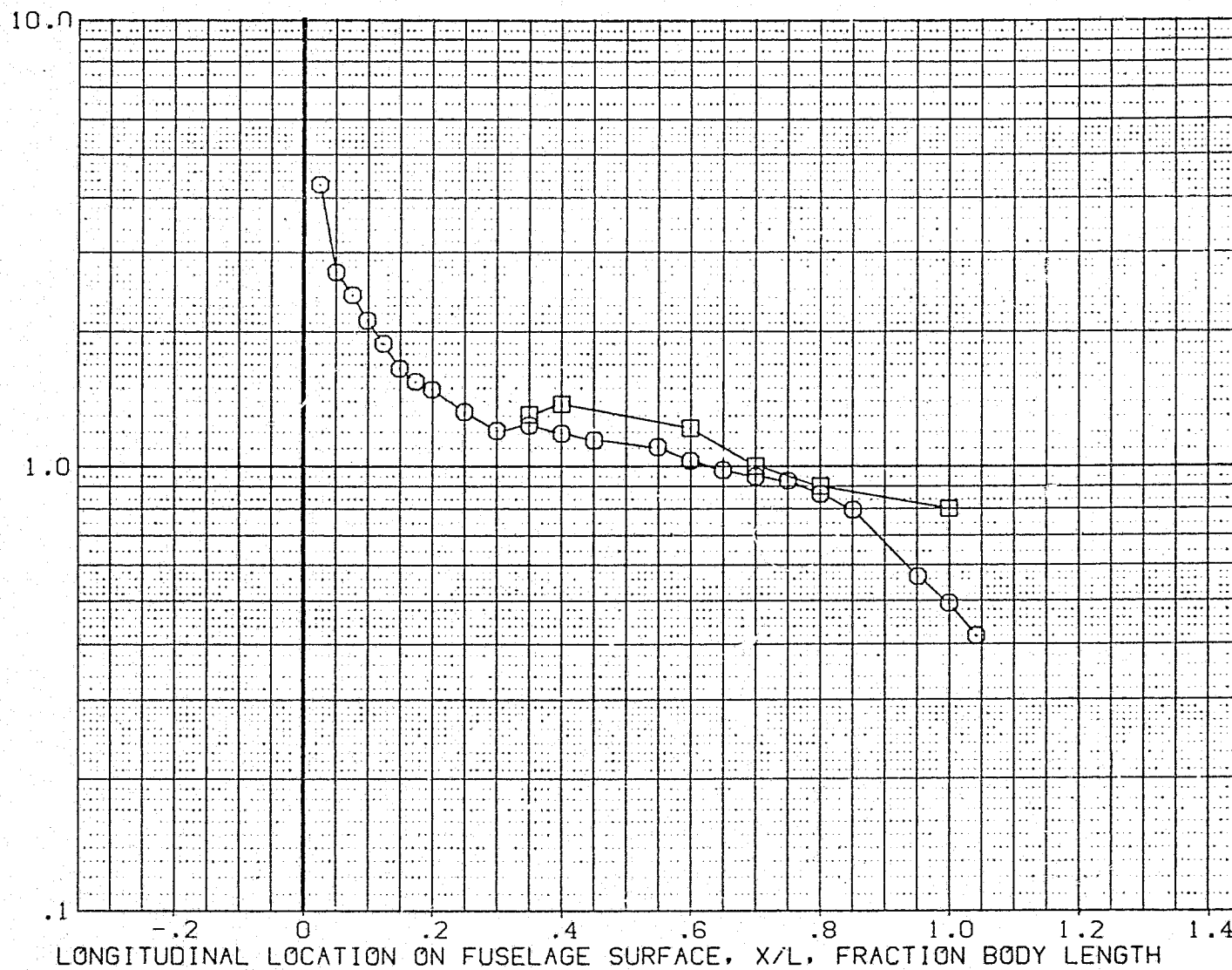
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FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE(RQSB07)

SYMBOL

Y(BP)

HAW/HT

RN/L

PARAMETRIC VALUES

○

.000
117.000

.900

3.121

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

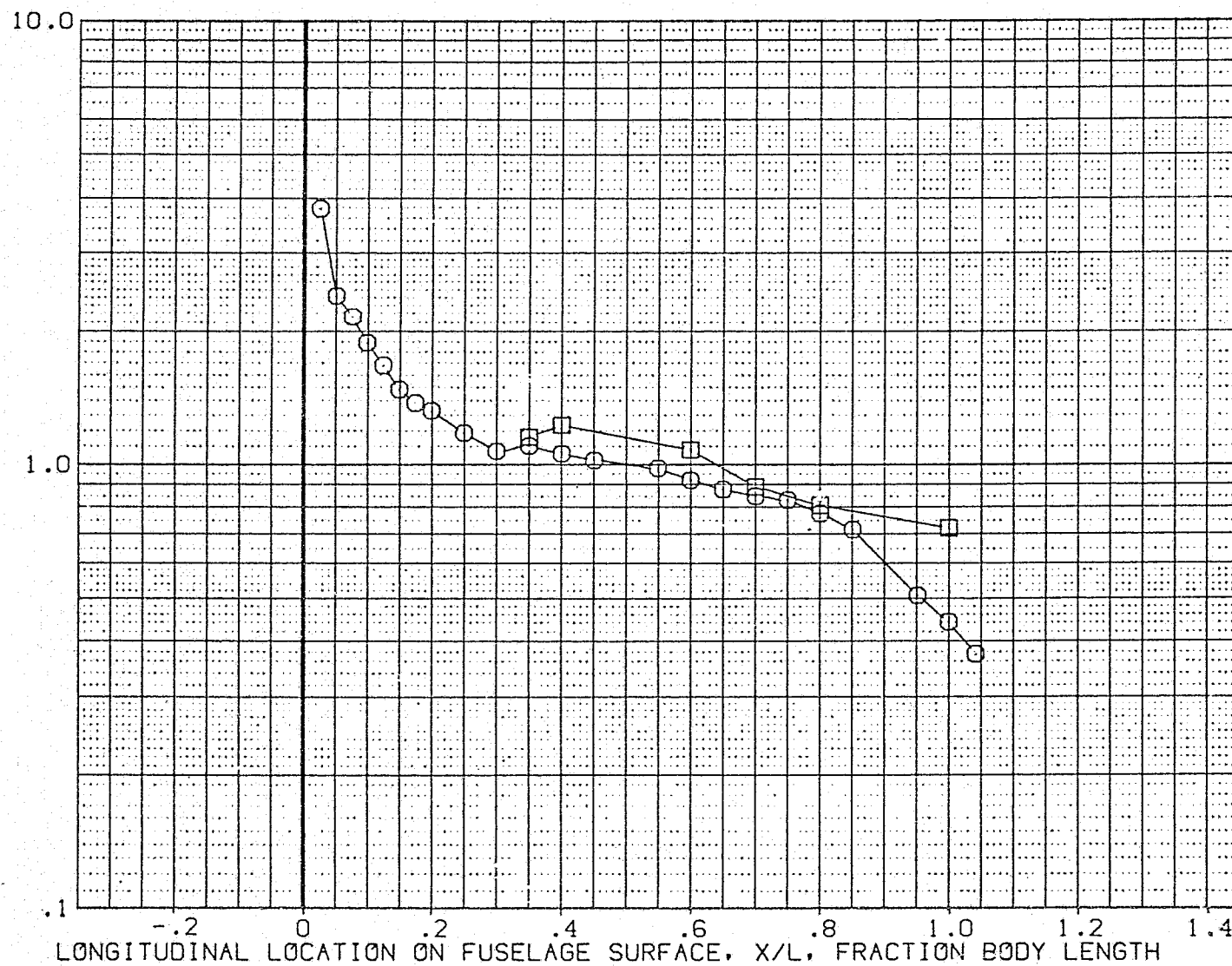
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FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB07)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	1.000	3.121
□	117.000		

PARAMETRIC VALUES			
ALPHA	30.000	BETA	1.000
MACH	6.000	ALPHAS	30.000
PHI	-2.000	PHIS	.000

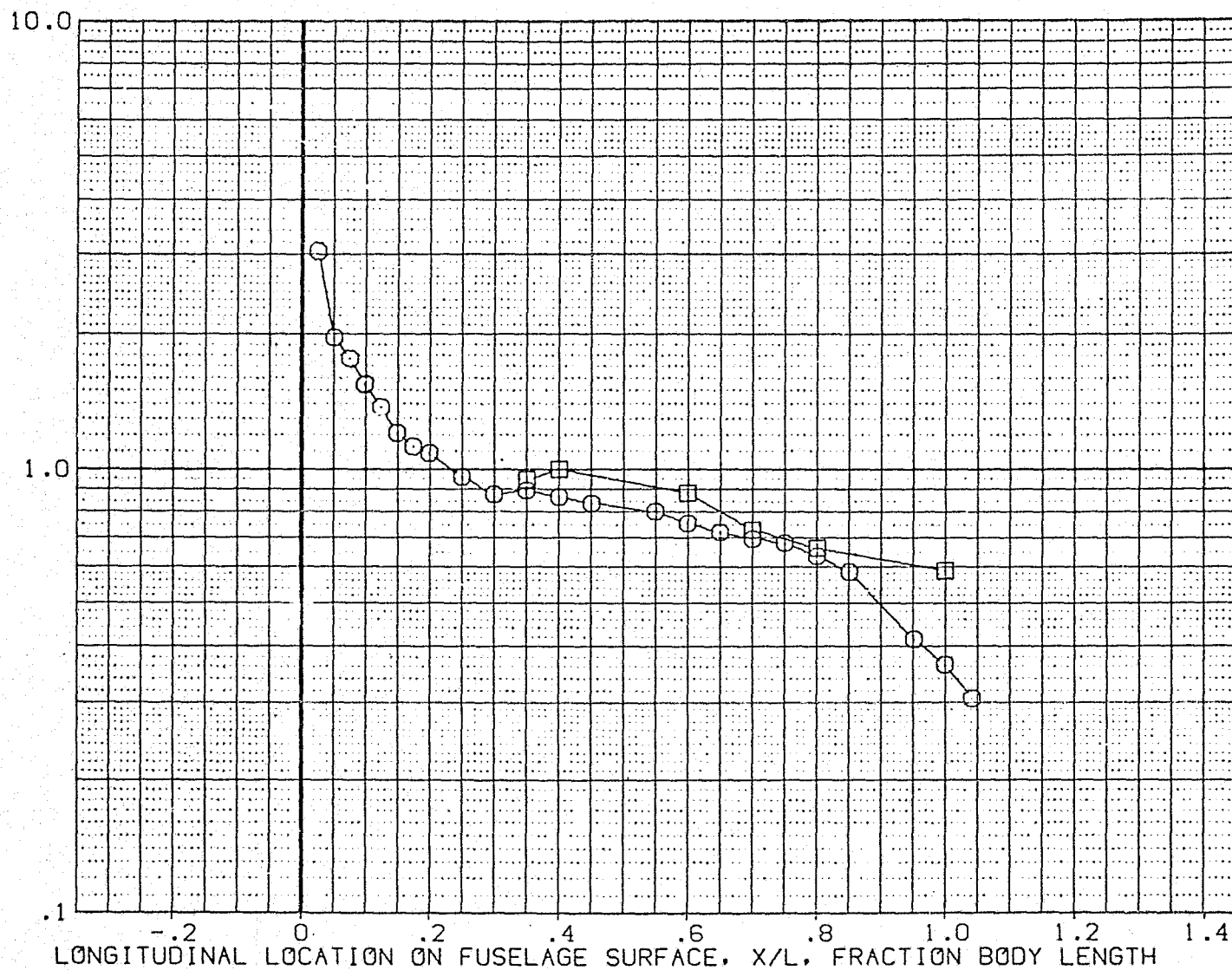
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FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE(RQSB07)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	.850	5.144
□	117.000		

PARAMETRIC VALUES			
ALPHA	30.000	BETA	1.000
MACH	6.000	ALPHAS	30.000
PHI	-2.000	PHIS	.000

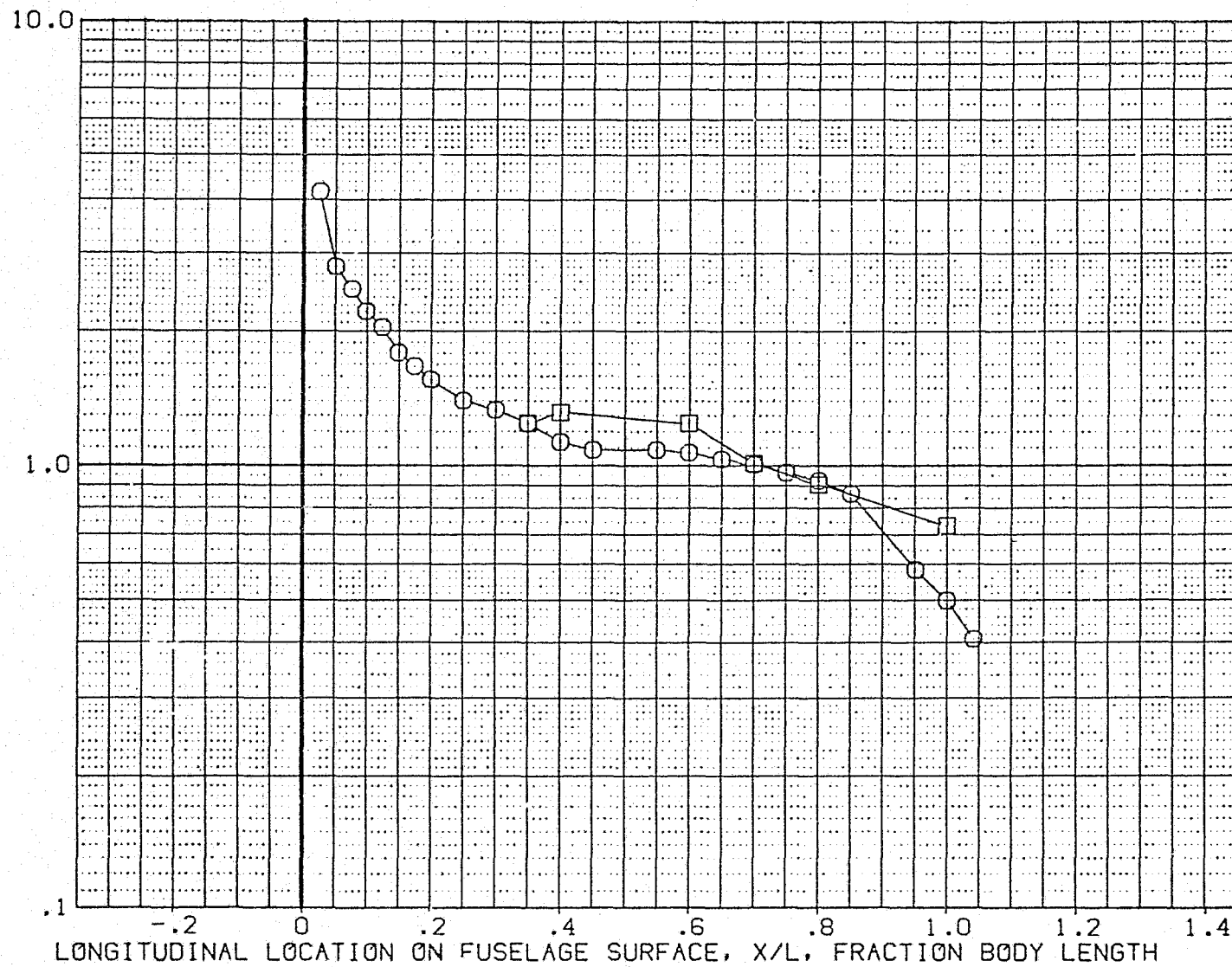
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FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB07)

SYMBOL	Y(BP)	HAW/HT	RN/L
○	.000	.900	5.144
□	117.000		

PARAMETRIC VALUES			
ALPHA	30.000	BETA	1.000
MACH	6.000	ALPHAS	30.000
PHI	-2.000	PHIS	.000

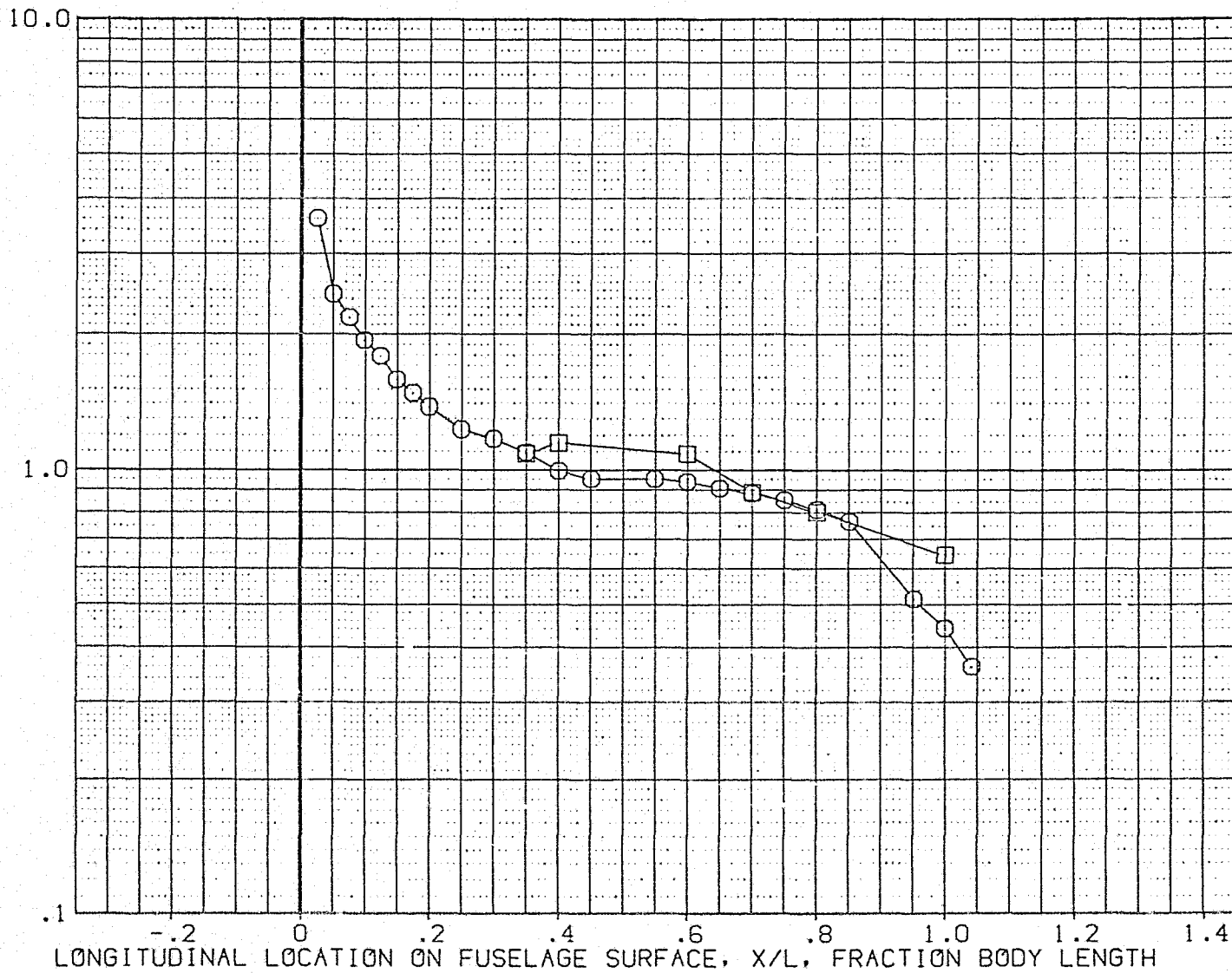
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB07)

SYMBOL

Y(BP)

HAW/HT

RN/L

PARAMETRIC VALUES

○

.000
117.000

1.000

5.144

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

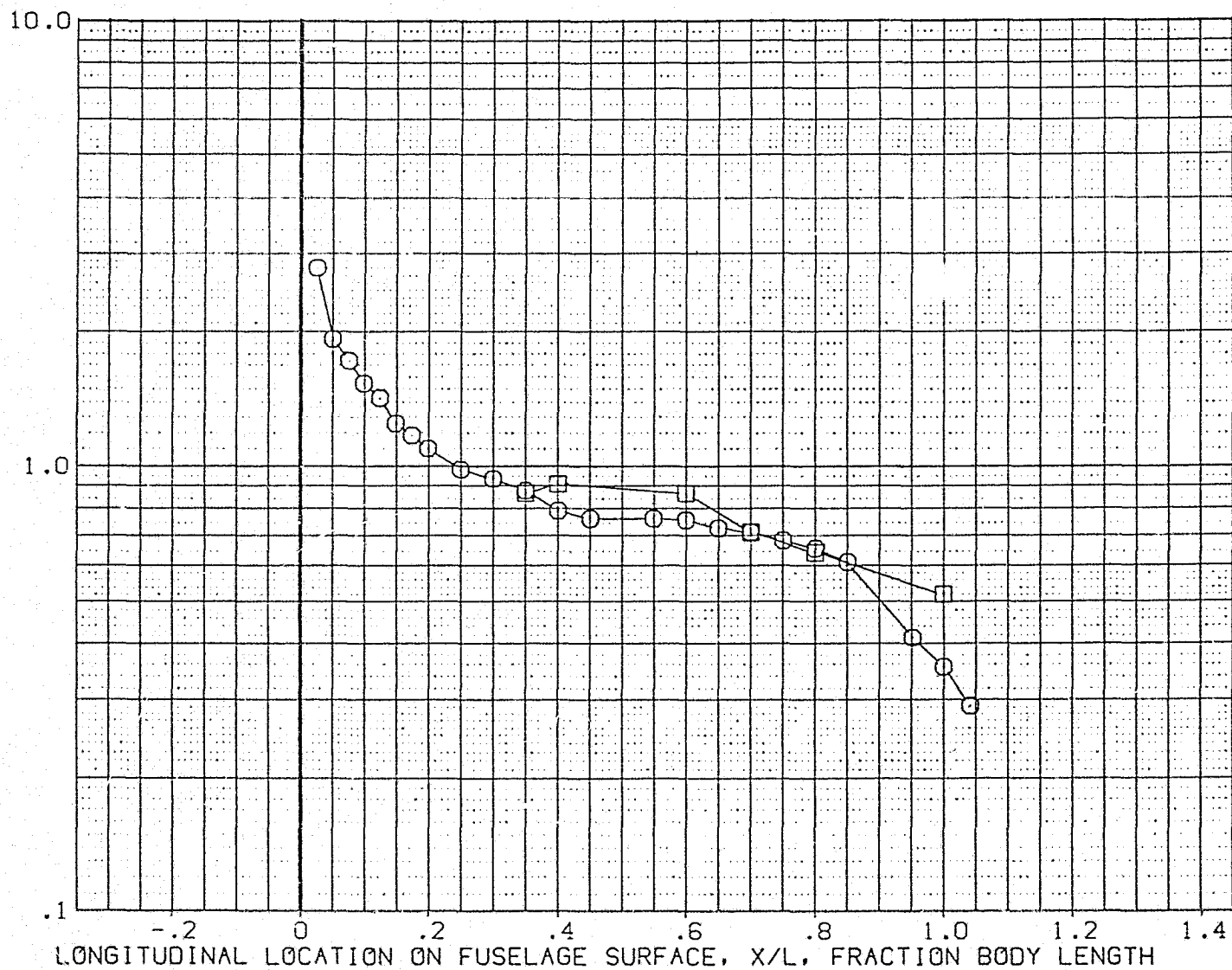
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 4 FUSELAGE LOWER SURFACE DISTRIBUTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSB01)	OH45 B22C7W11M4V7F5 FUSELAGE LOWER SURFACE	25.000	.000	6.000
(RQSB03)	OH45 B22C7W11M4V7F5 FUSELAGE LOWER SURFACE	35.000	.000	6.000
(RQSB05)	OH45 B22C7W11M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

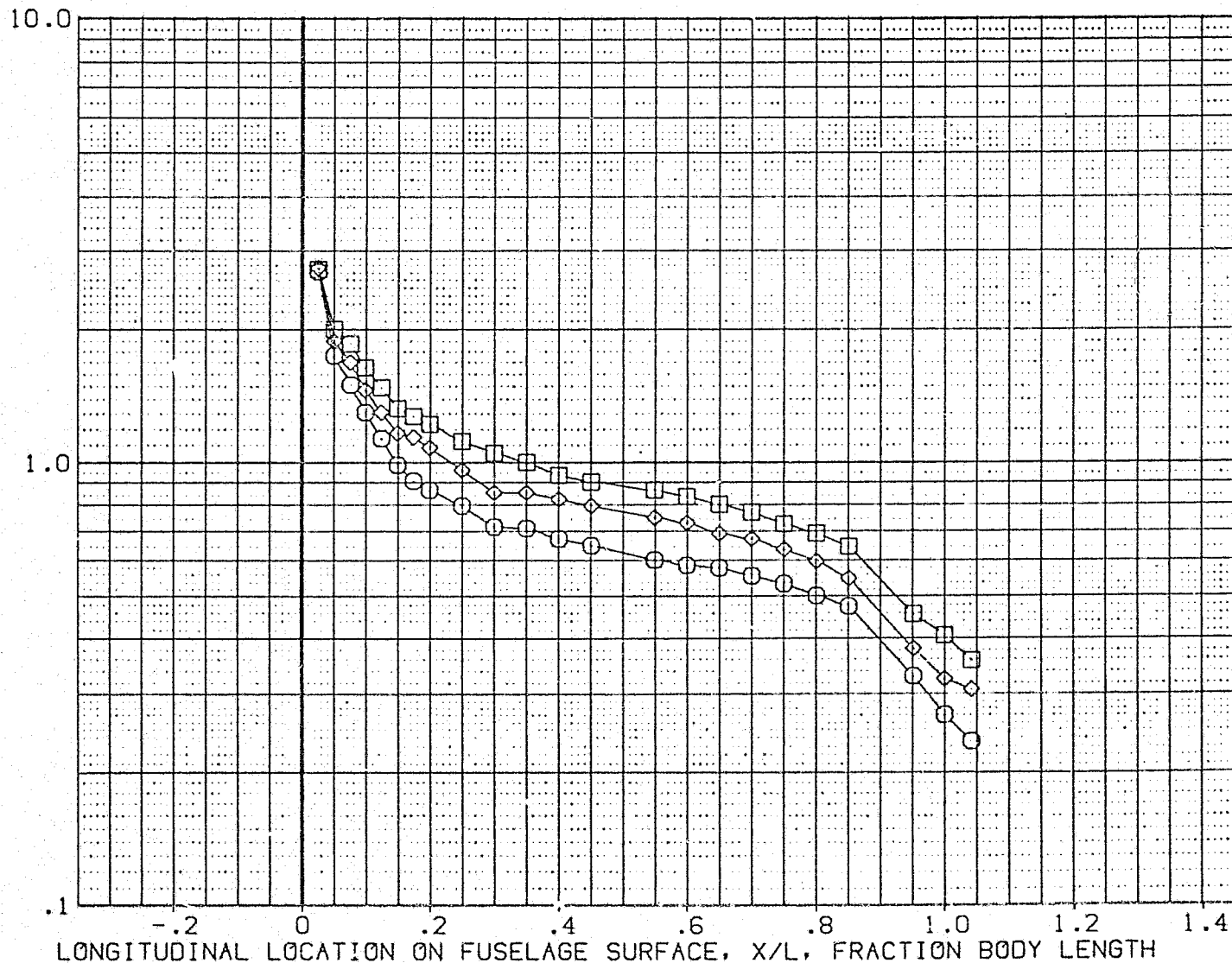


FIG 5 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF ATTACK

RN/L = 2.956 HAW/HT = 1.000 Y(BP) = .000

PAGE 19

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSB01)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	25.000	.000	6.000
(RQSB03)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	35.000	.000	6.000
(RQSB05)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

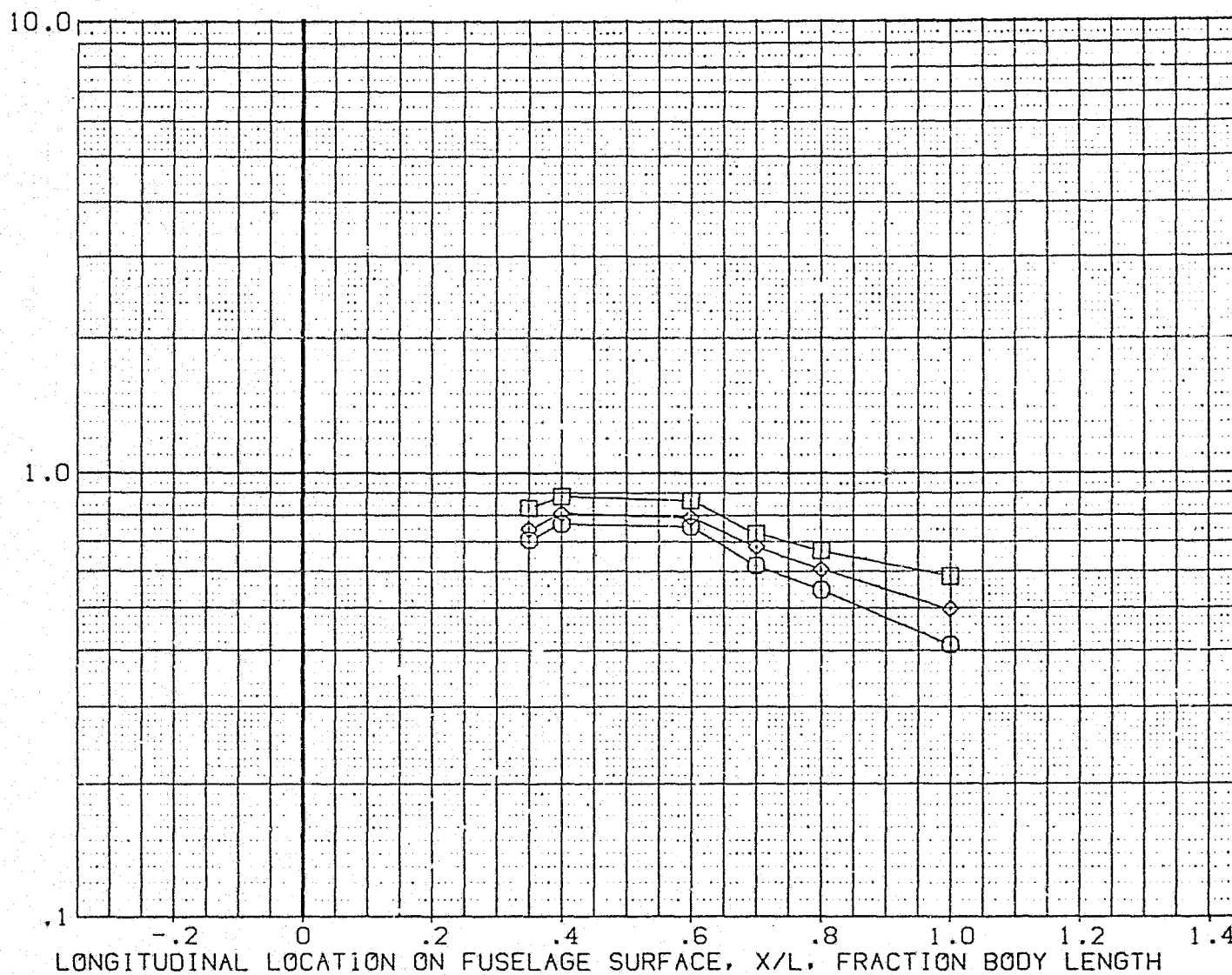


FIG 5 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF ATTACK

RN/L = 2.956 HAW/HT= 1.000 Y(BP) = 117.000

PAGE 20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R05B05)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(R05B07)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

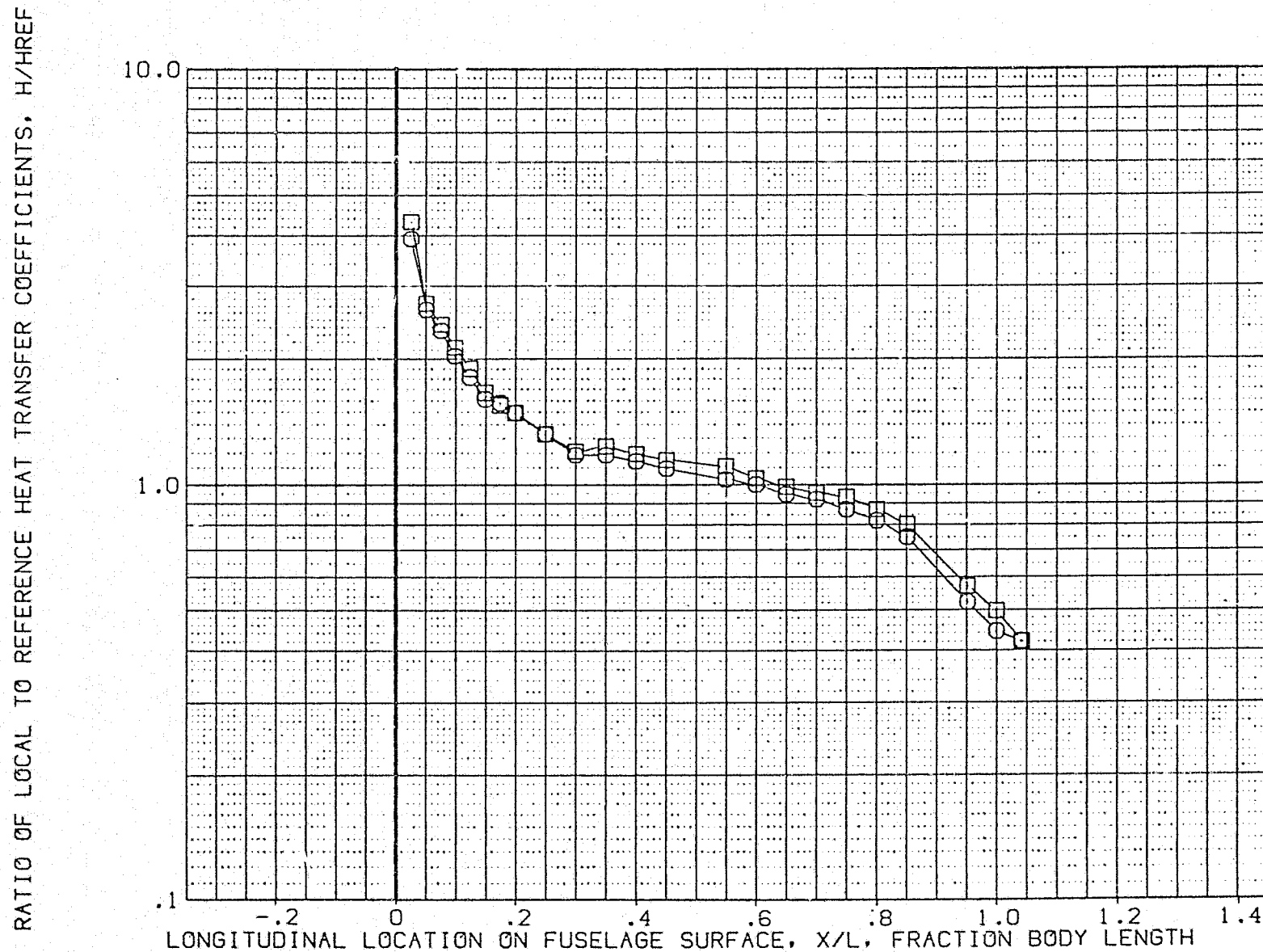


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.951 HAW/HT = .850 Y(BP) = .000

PAGE 21

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R05B05)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(R05B07)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

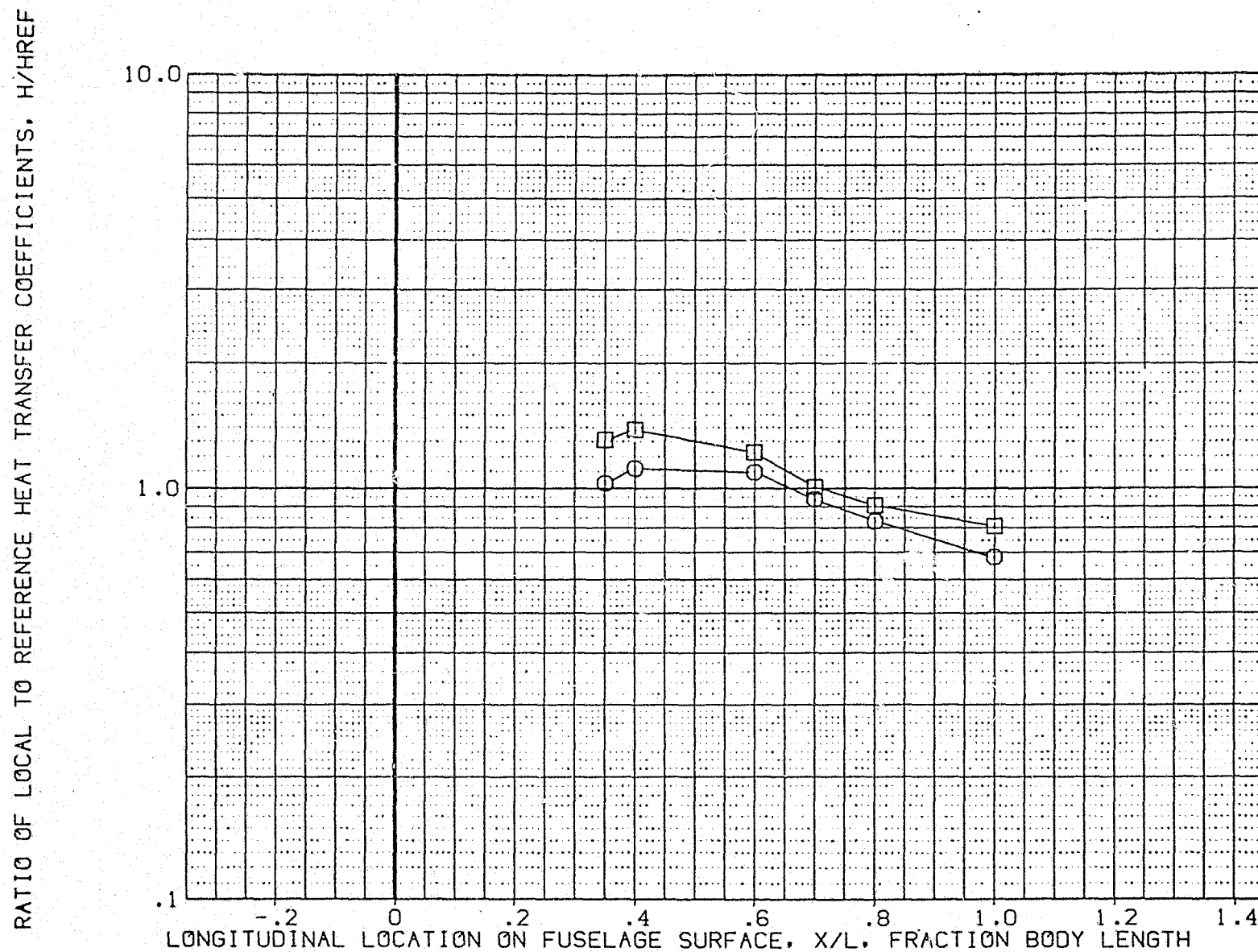


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.951 HAW/HT= .850 Y(BP) = 117.000

PAGE 22

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R05805)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(R05807)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

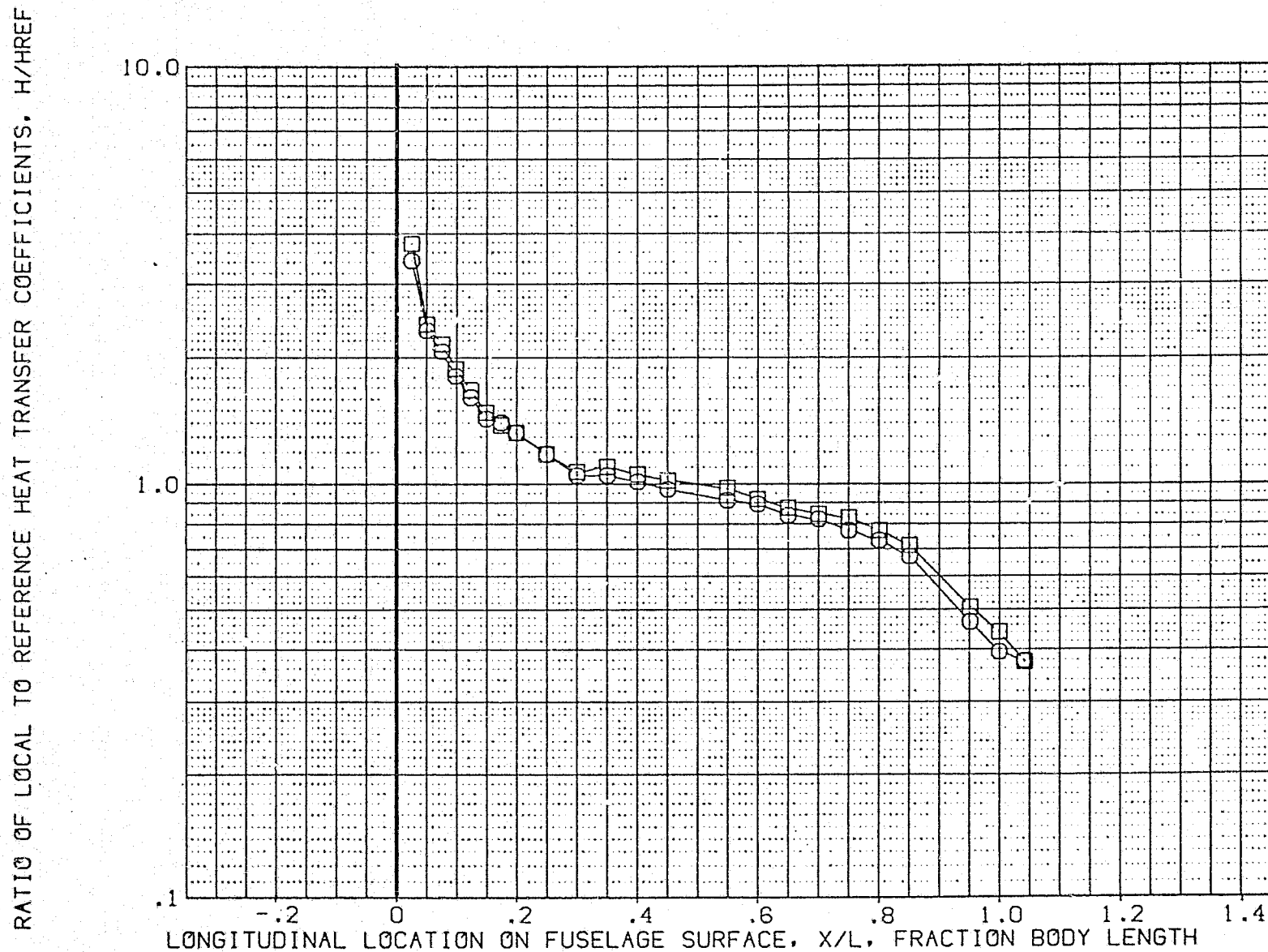


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.951 HAW/HT = .900 Y(BP) = .000

PAGE 23

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSB05)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(RQSB07)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

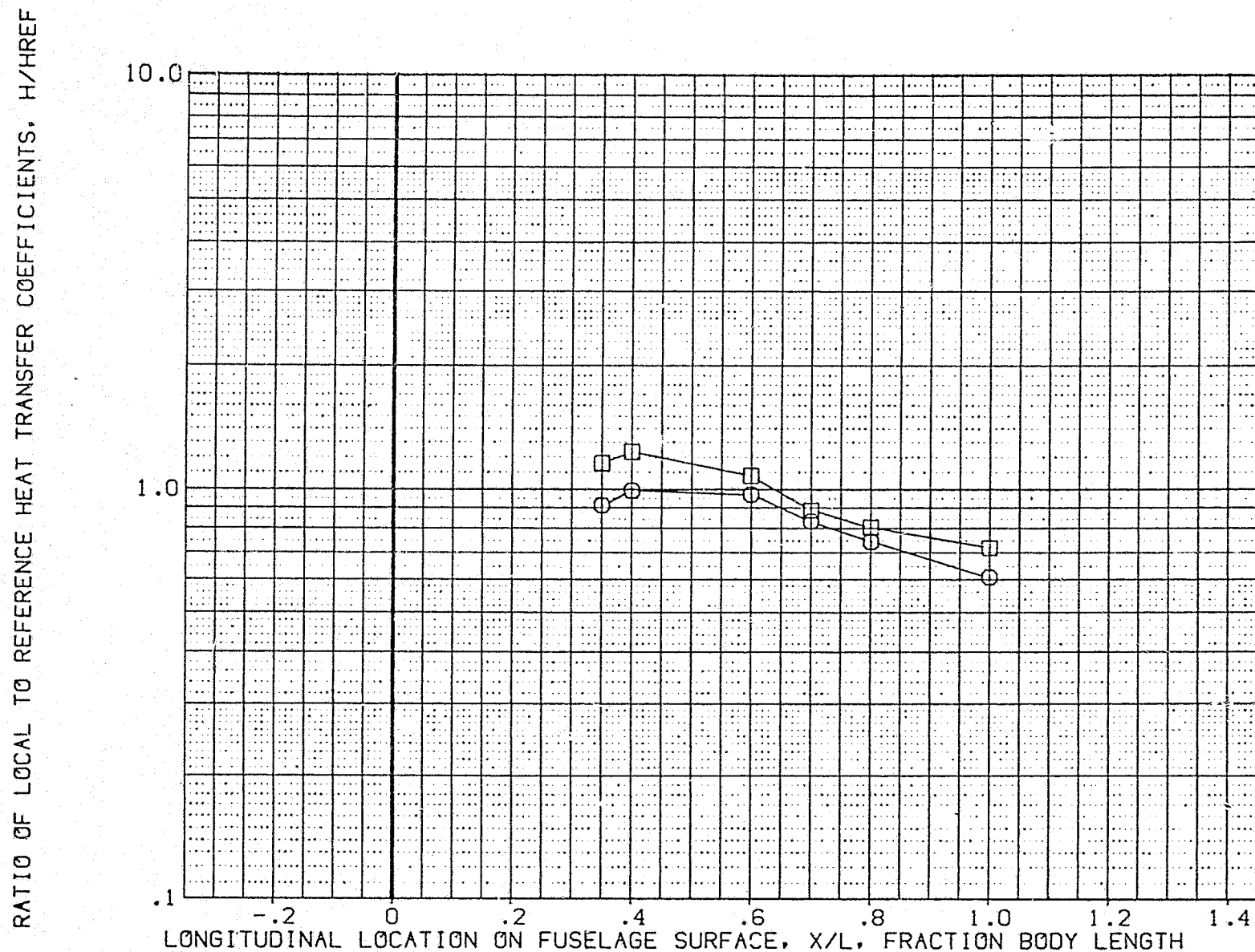


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.951 HAW/HT = .900 Y(BP) = 117.000

PAGE 24

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSB05)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(RQSB07)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

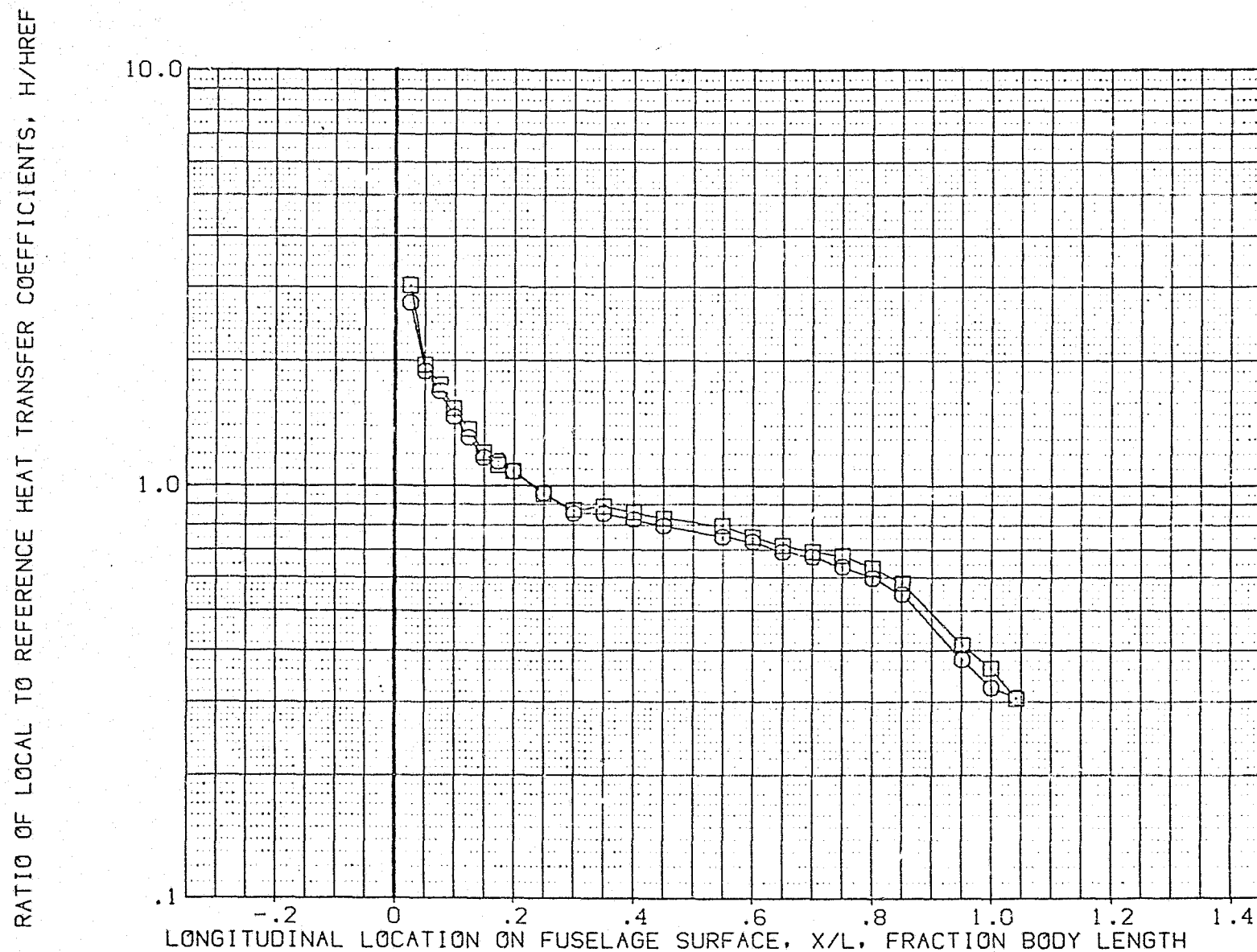


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

$RN/L = 2.951$ $HAW/HT = 1.000$ $Y(BP) = .000$

PAGE 25

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0805)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(R0807)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

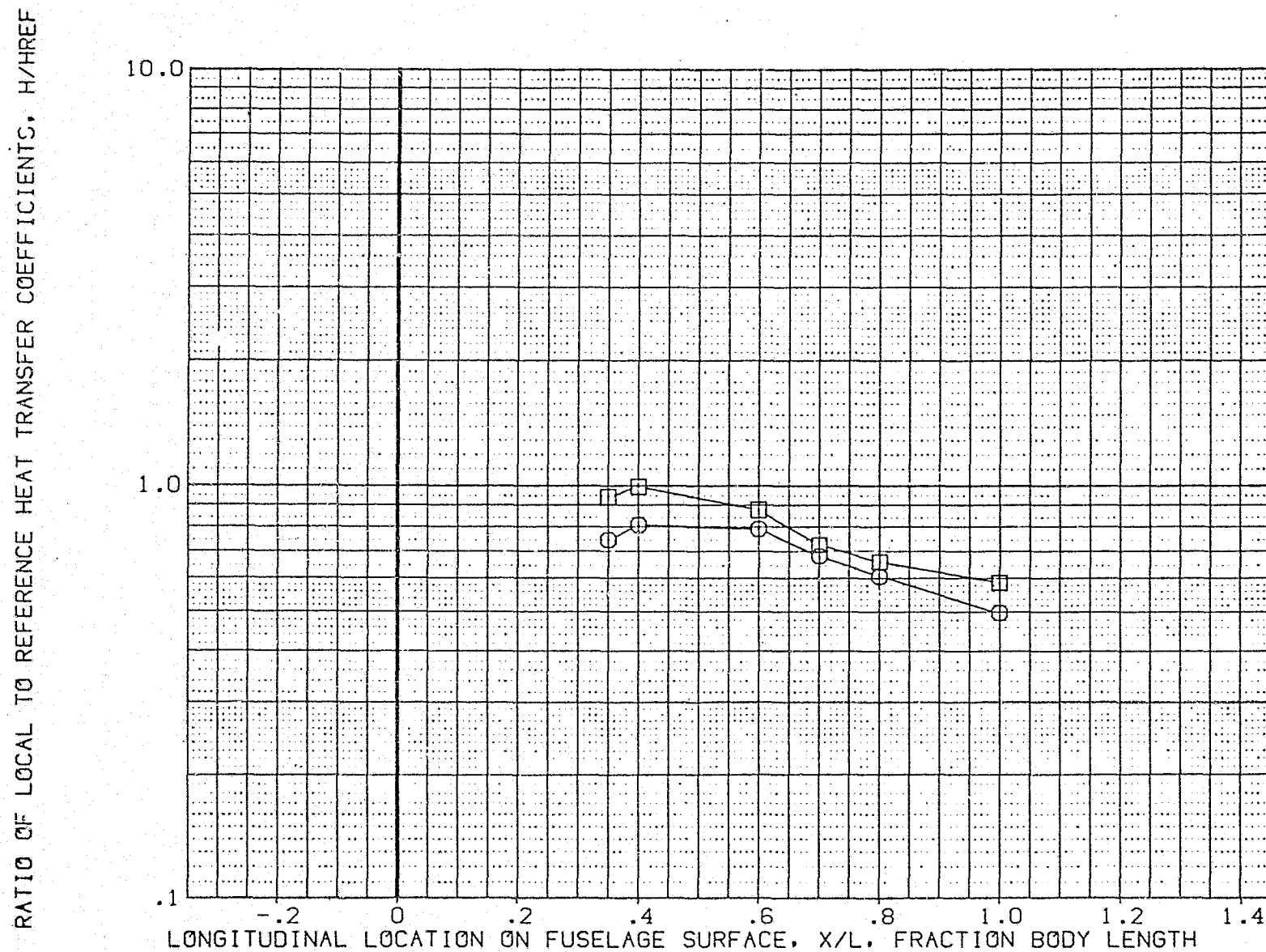


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.951 HAW/HT= 1.000 Y(BP) = 117.000

PAGE 26

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSB05)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(RQSB07)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

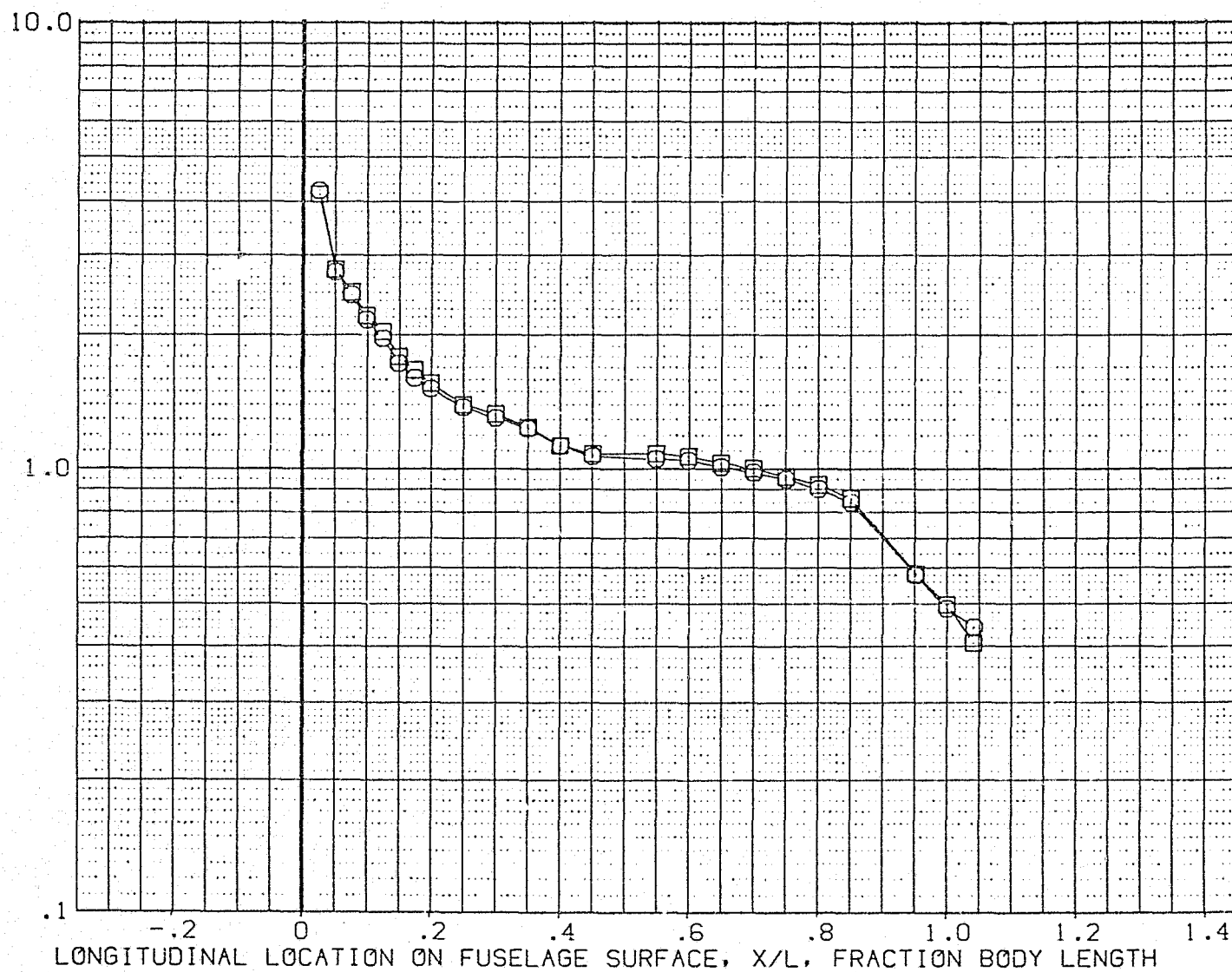


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.284 HAW/HT = .850 Y(BP) = .000

PAGE 27

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0S805)	0H45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(R0S807)	0H45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

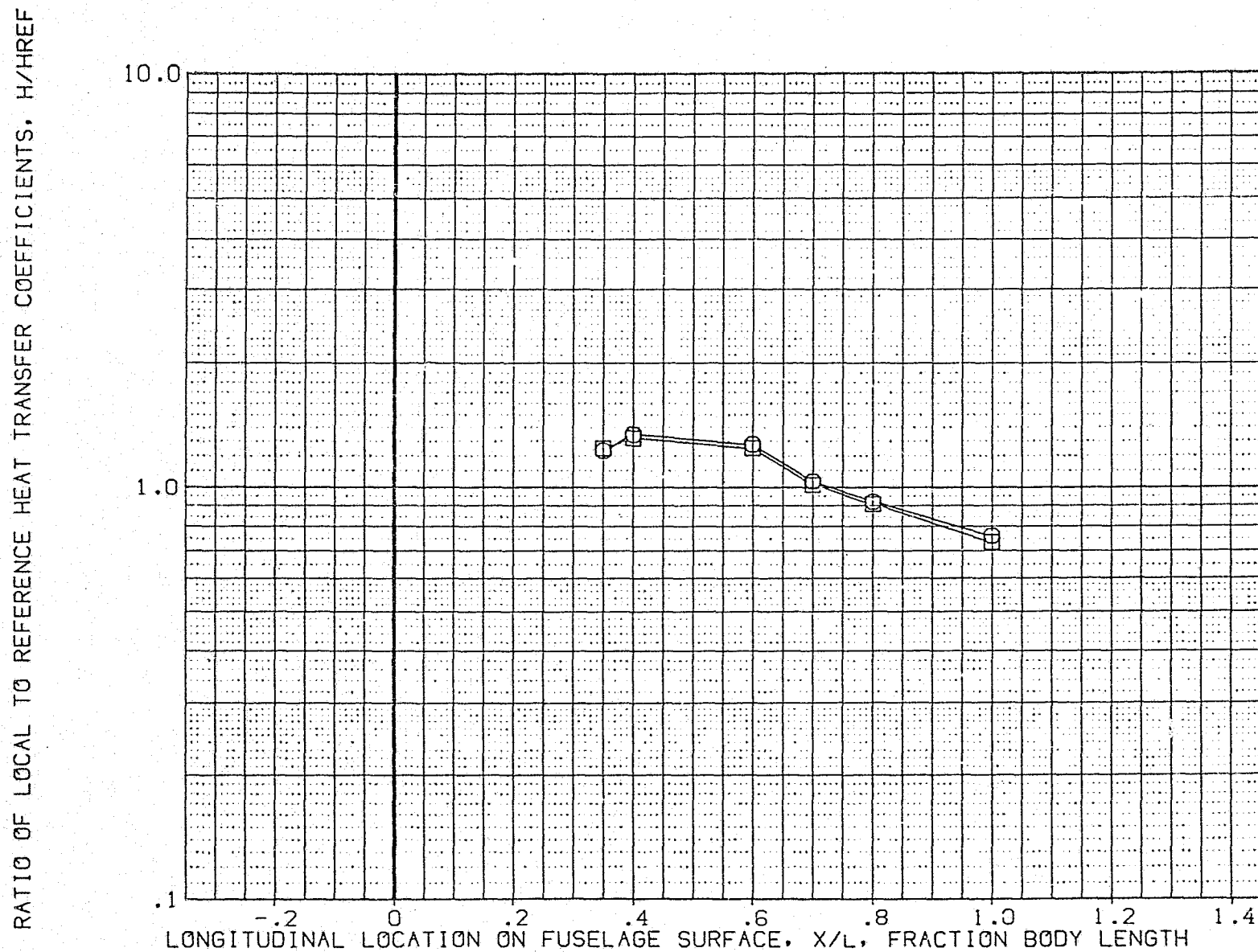


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.284 HAW/HT = .850 Y(BP) = 117.000

PAGE 28

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSB05)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(RQSB07)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

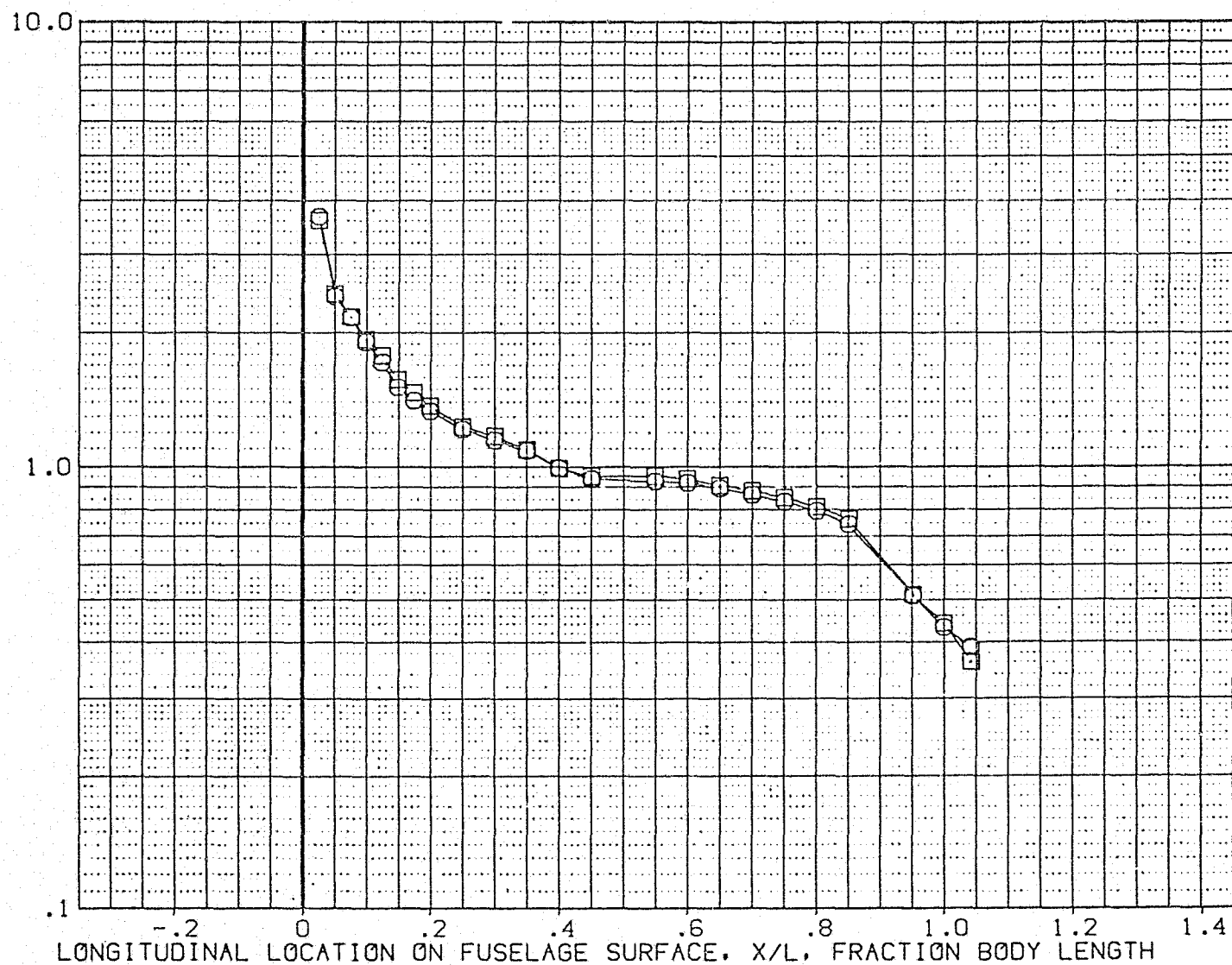


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.284 HAW/HT = .900 Y(BP) = .000

PAGE 29

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(ROS805)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(ROS807)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

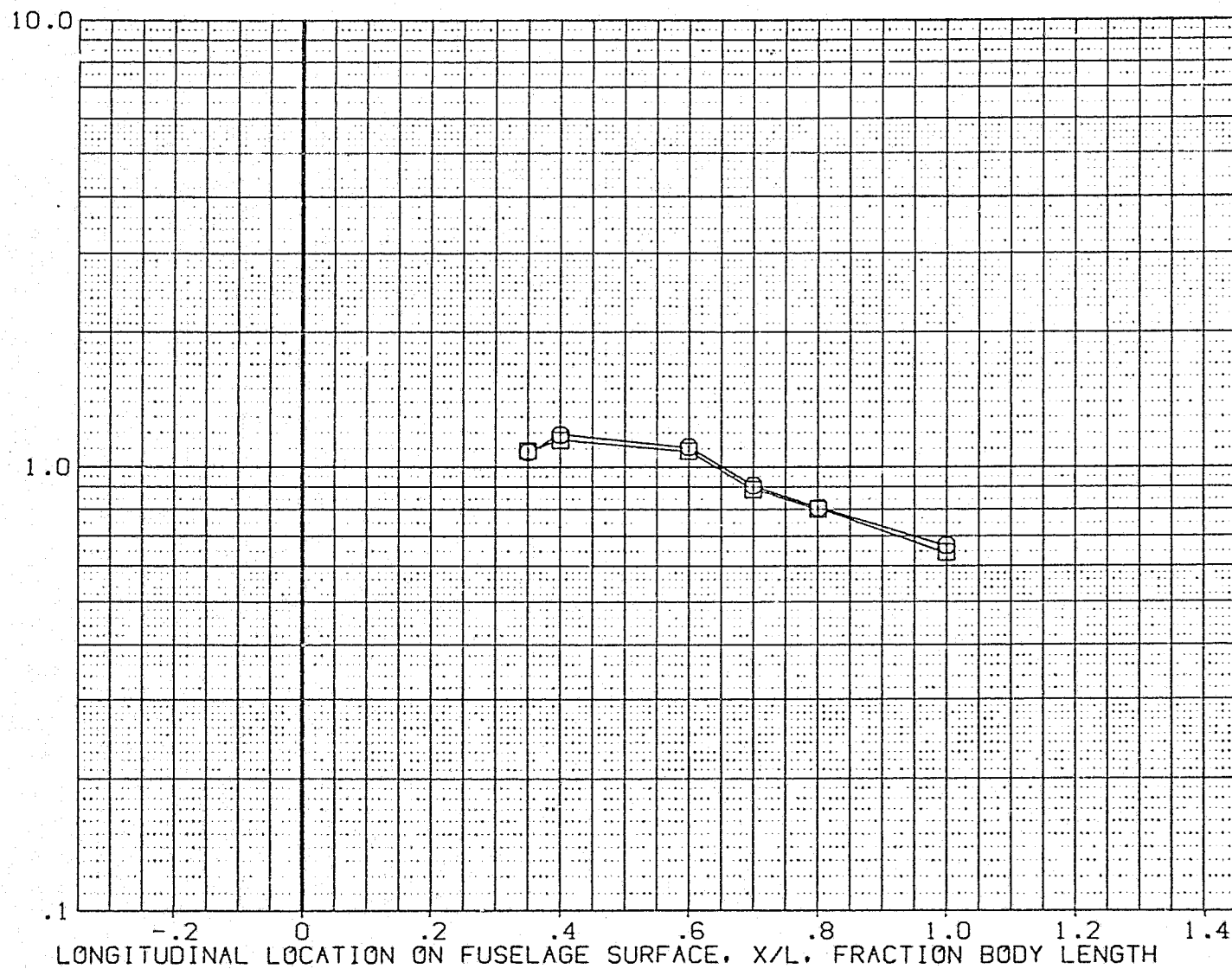


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.284 HAW/HT= .900 Y(BP) = 117.000

PAGE 30

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSB05)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(RQSB07)	OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

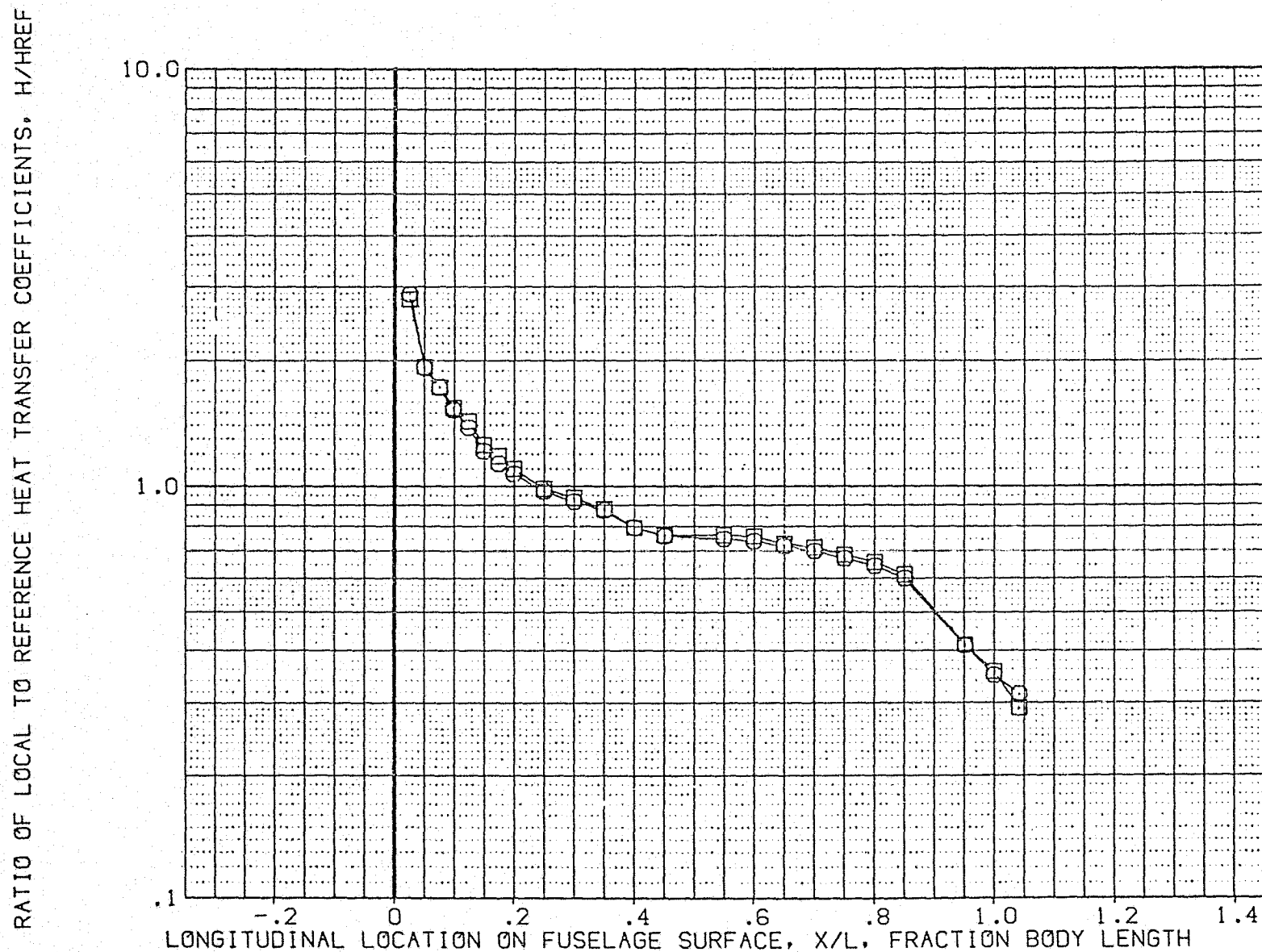


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.284 HAW/HT= 1.000 Y(BP) = .000

PAGE 31

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R05805)	CH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	.000	6.000
(R05807)	CH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE	30.000	1.000	6.000

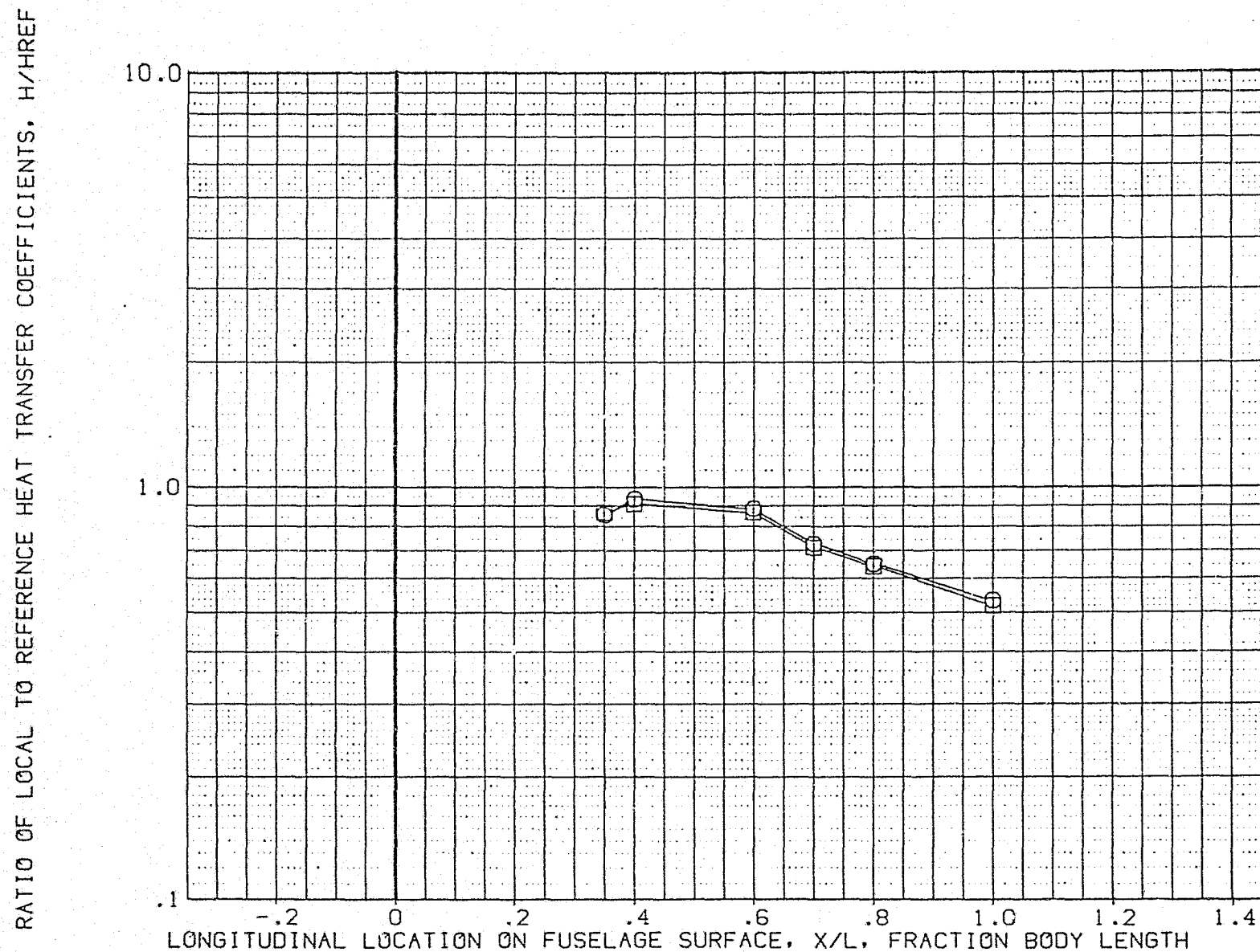


FIG 6 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

$RN/L = 5.284$ $HAW/HT = 1.000$ $Y(BP) = 117.000$

PAGE 32

0H45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB05)

SYMBOL

RN/L

Y(BP)

HAW/HT

PARAMETRIC VALUES

□

2.951
5.284

.000

.950

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

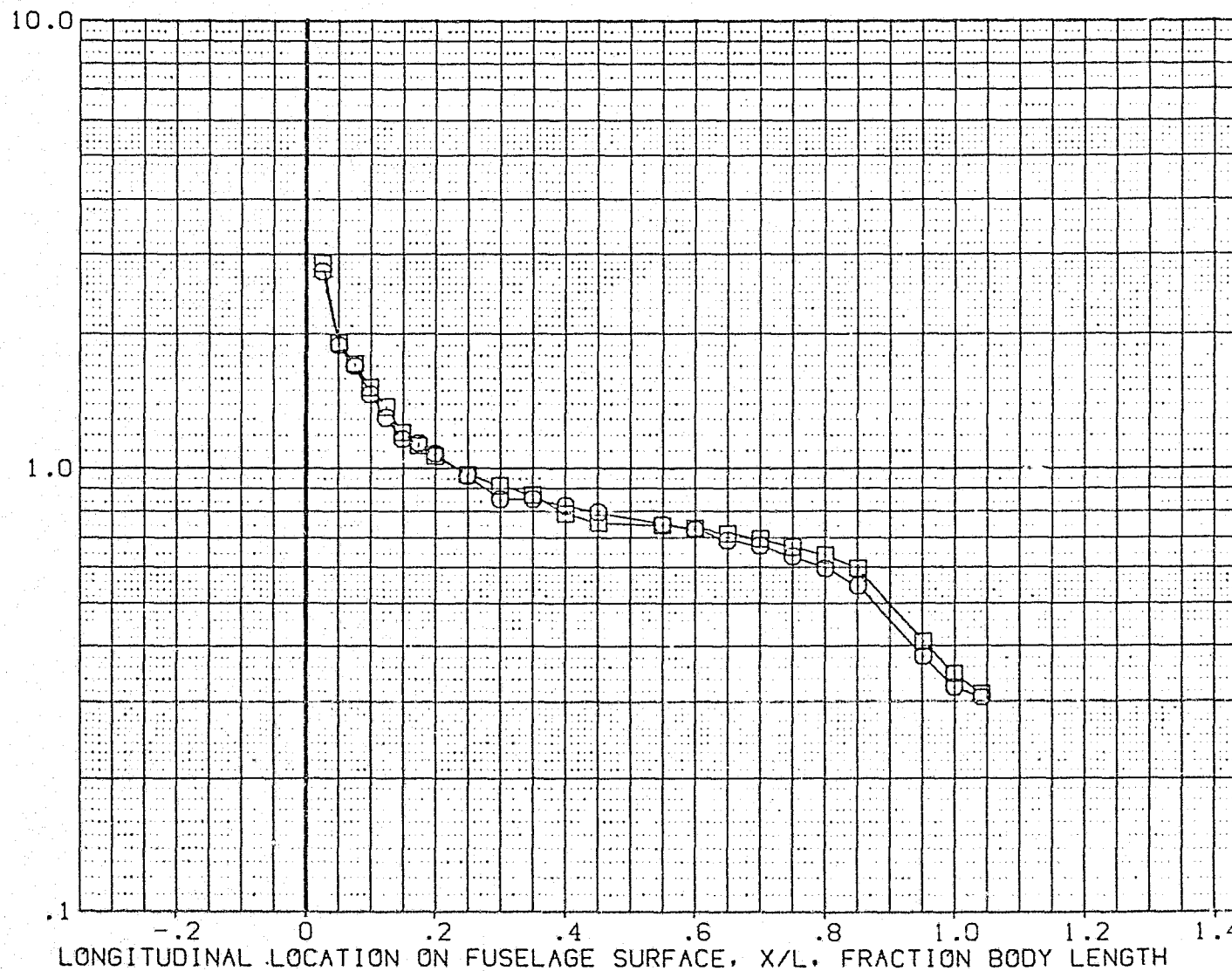


FIG 7 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB05)

SYMBOL

RN/L

Y(BP)

HAW/HT

PARAMETRIC VALUES

○
□2.951
5.284

117.000

.850

ALPHA

30.000

BETA

.000

MACH

8.000

ALPHAS

30.000

PHI

.000

PHIS

.000

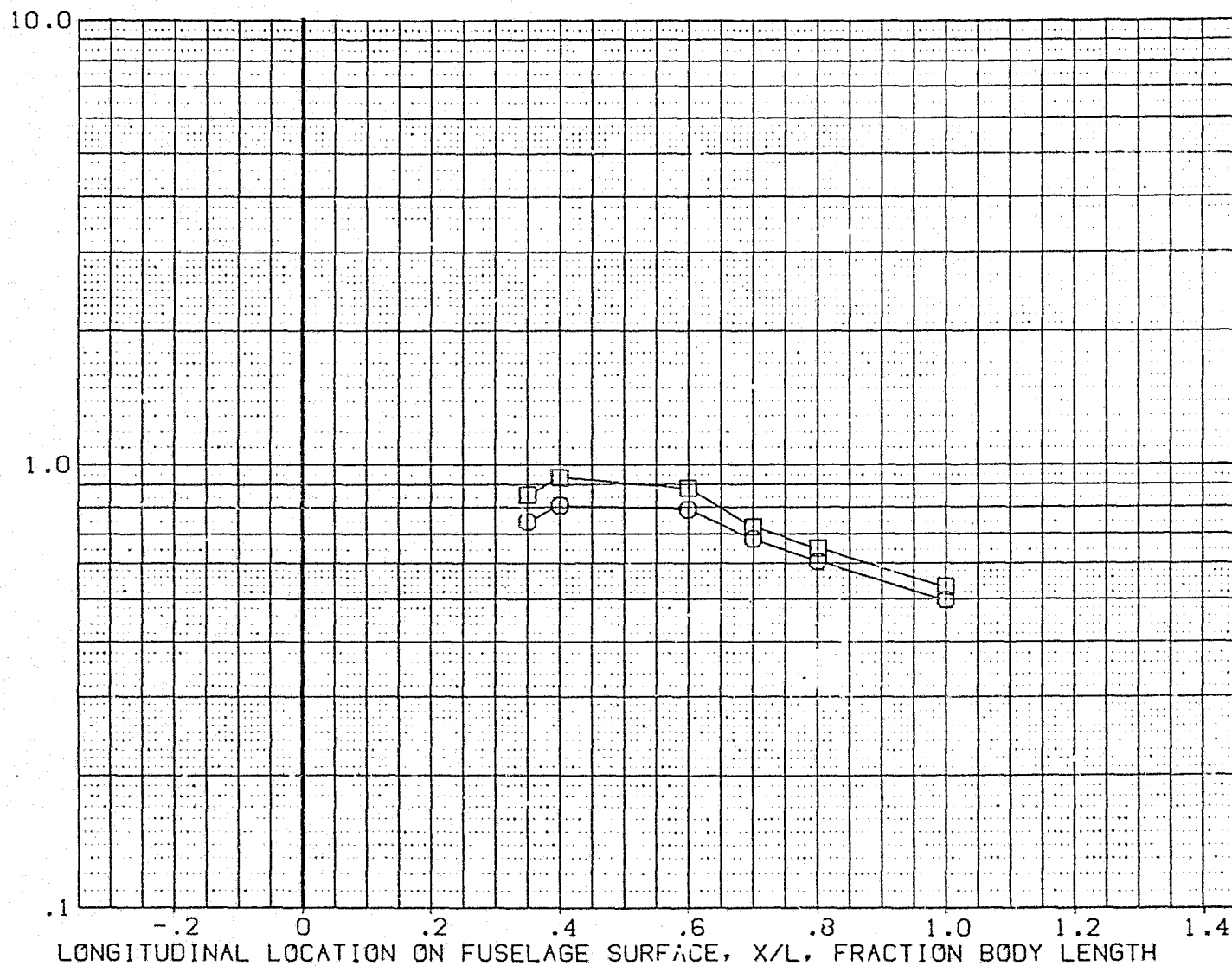
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 7 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB07)

SYMBOL

RN/L

Y(BP)

HAW/HT

PARAMETRIC VALUES

○
□3.121
5.144

.000

.850

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

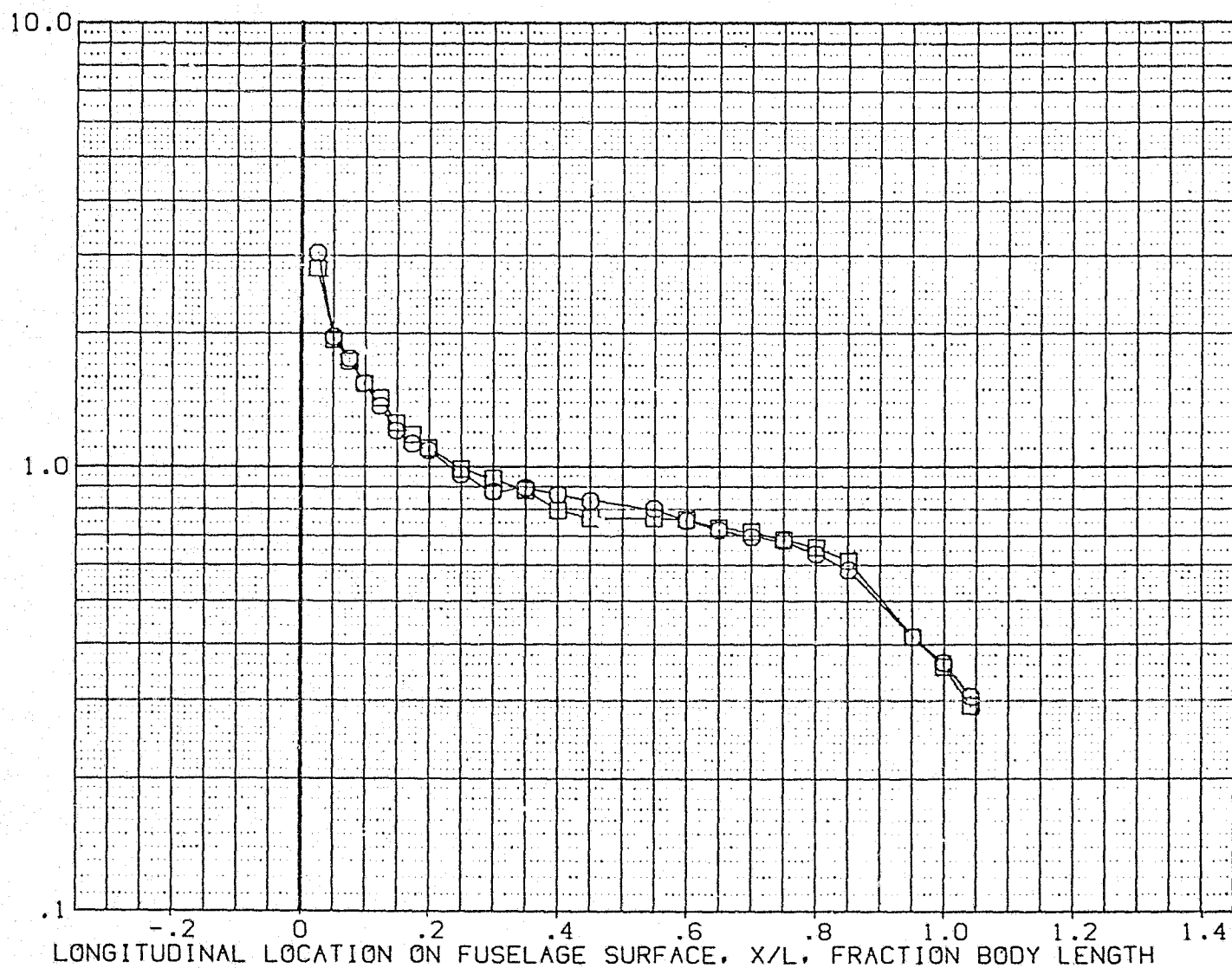
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 7 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB07)

SYMBOL

RN/L

Y(BP)

HAW/HT

PARAMETRIC VALUES

○

3.121

117.000

.850

ALPHA

30.000

BETA

1.000

□

5.144

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

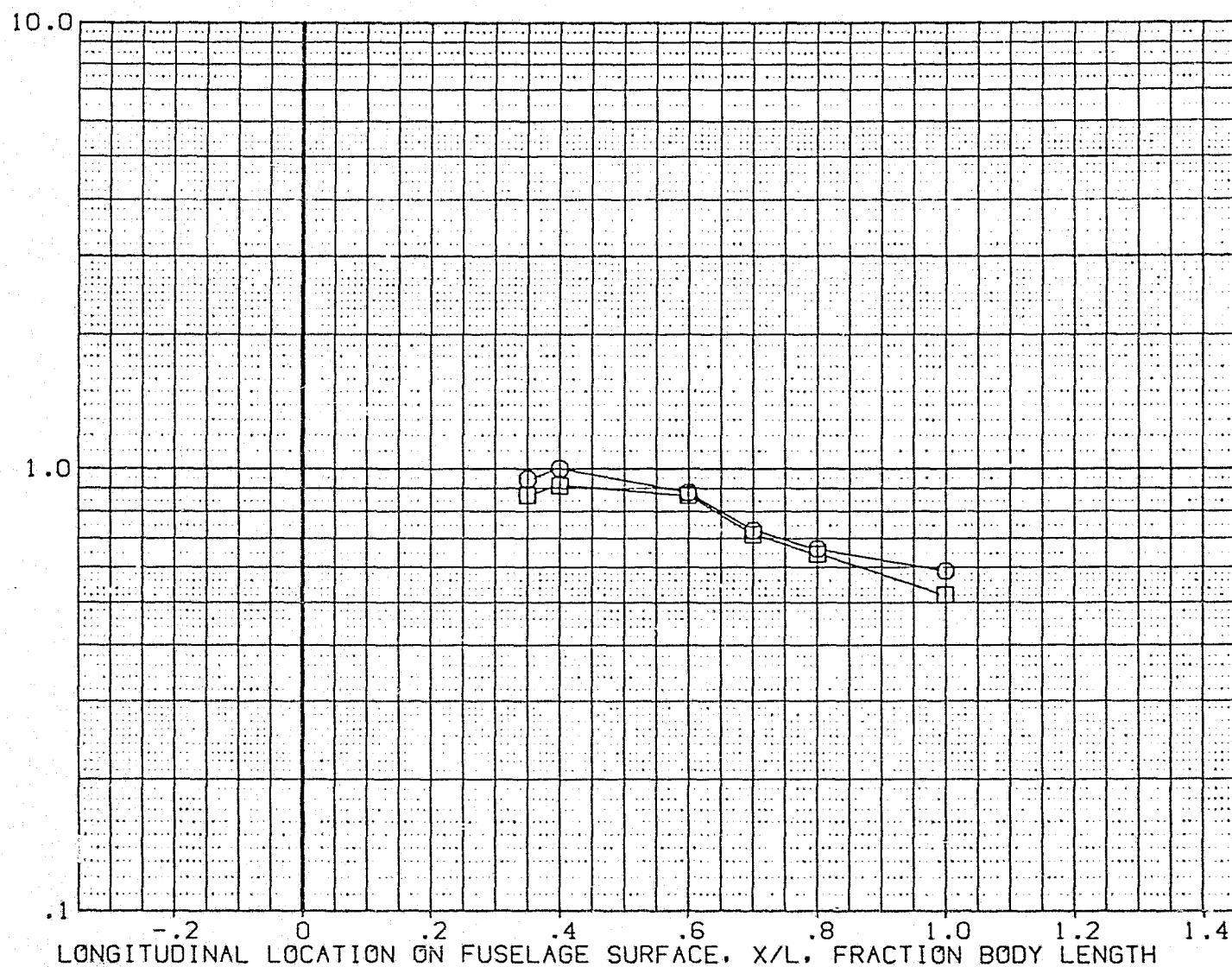


FIG 7 FUSELAGE LOWER SURFACE DISTRIBUTION VARIATION WITH REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU02)

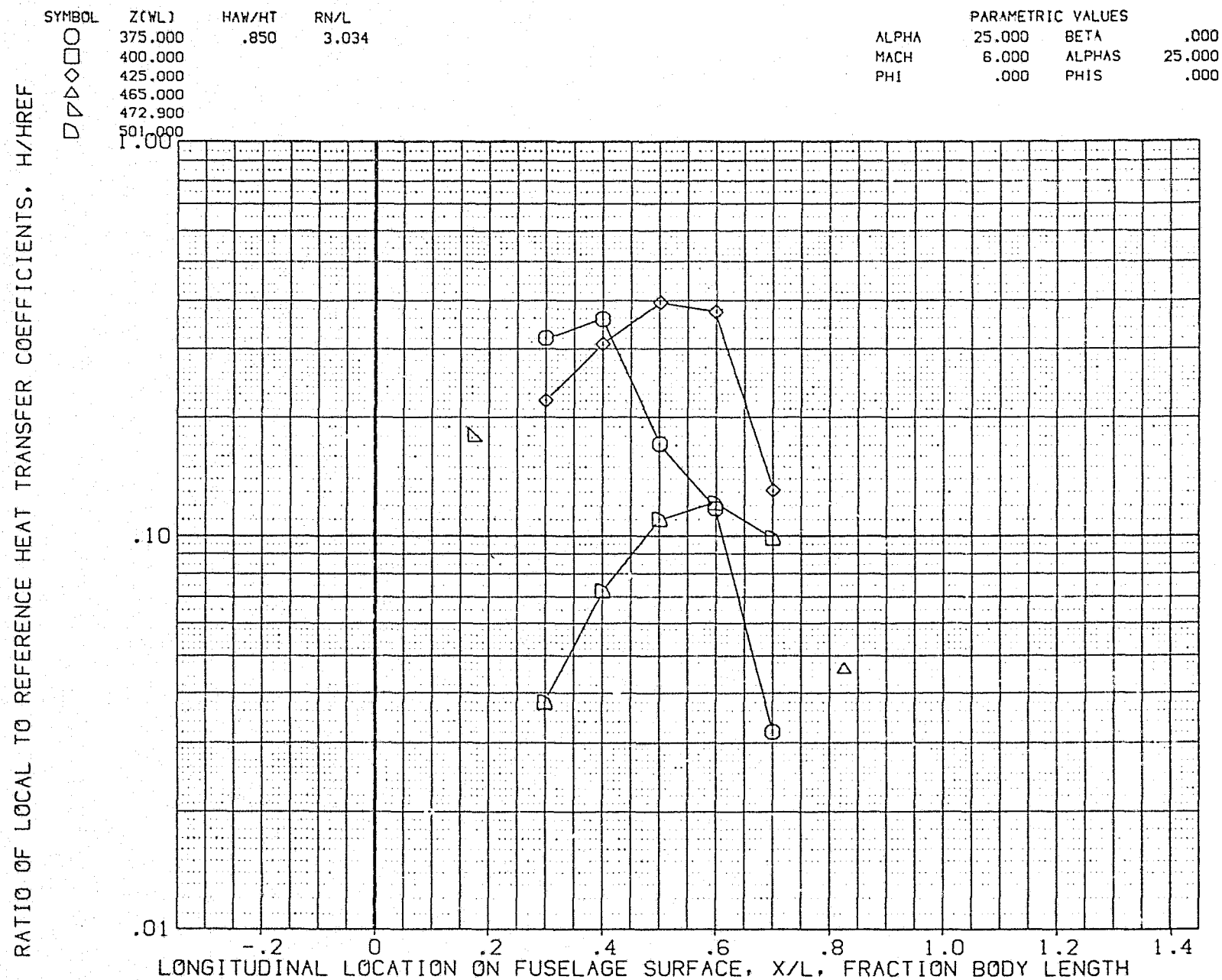


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU02)

PARAMETRIC VALUES

.000

25.000

.000

LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH

FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU02)

SYMBOL	Z(WL)	HAW/HT	RN/L
○	375.000	1.000	3.034
□	400.000		
△	425.000		
◇	465.000		
▽	472.900		
◇	501.000		

PARAMETRIC VALUES			
ALPHA	25.000	BETA	.000
MACH	6.000	ALPHAS	25.000
PHI	.000	PHIS	.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

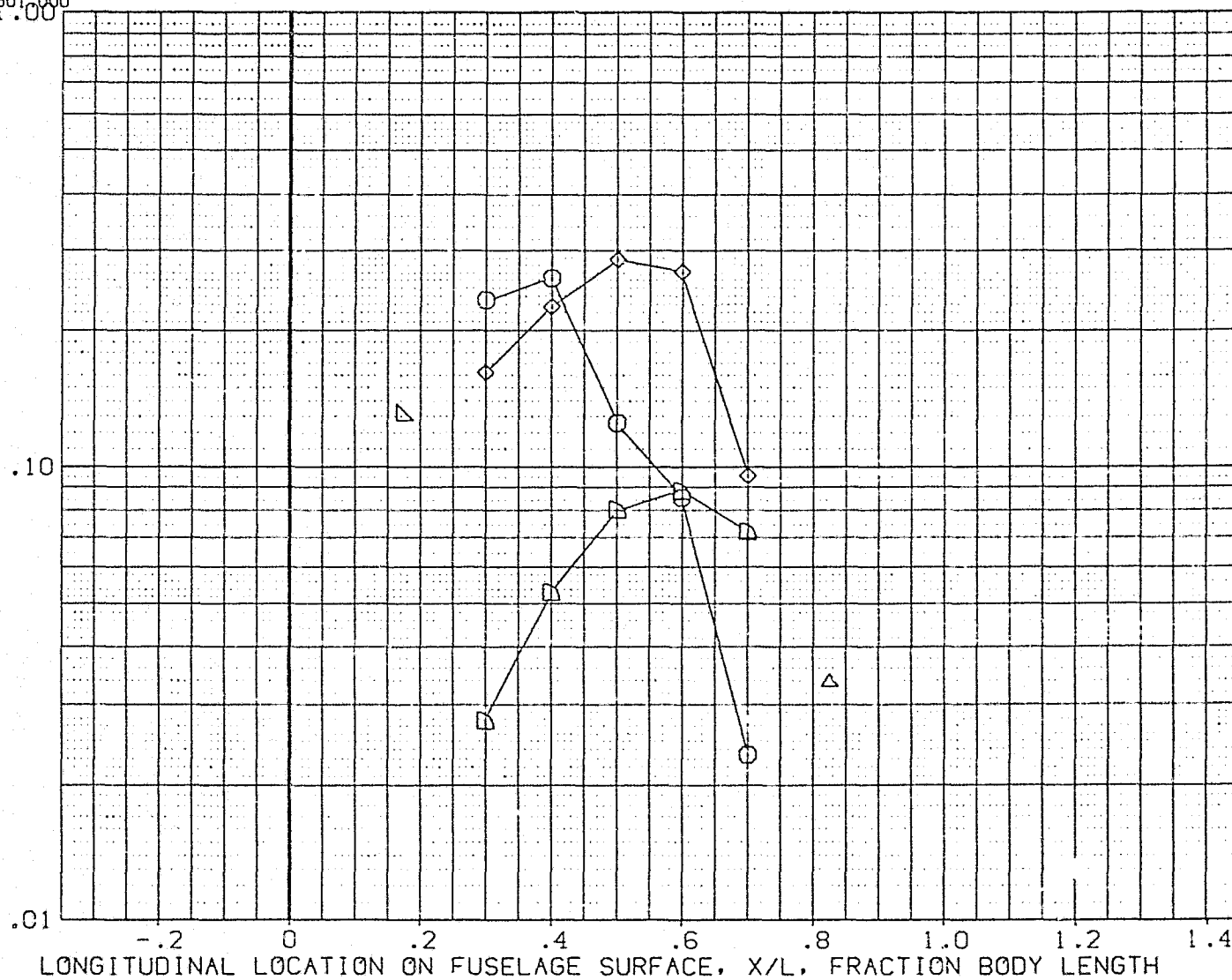


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU04)

SYMBOL

Z(WL)

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

35.000

BETA

.000

MACH

6.000

ALPHAS

35.000

PHI

.000

PHIS

.000

375.000
400.000
425.000
465.000
472.300
501.000
1.00

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

○
□
◇
▽

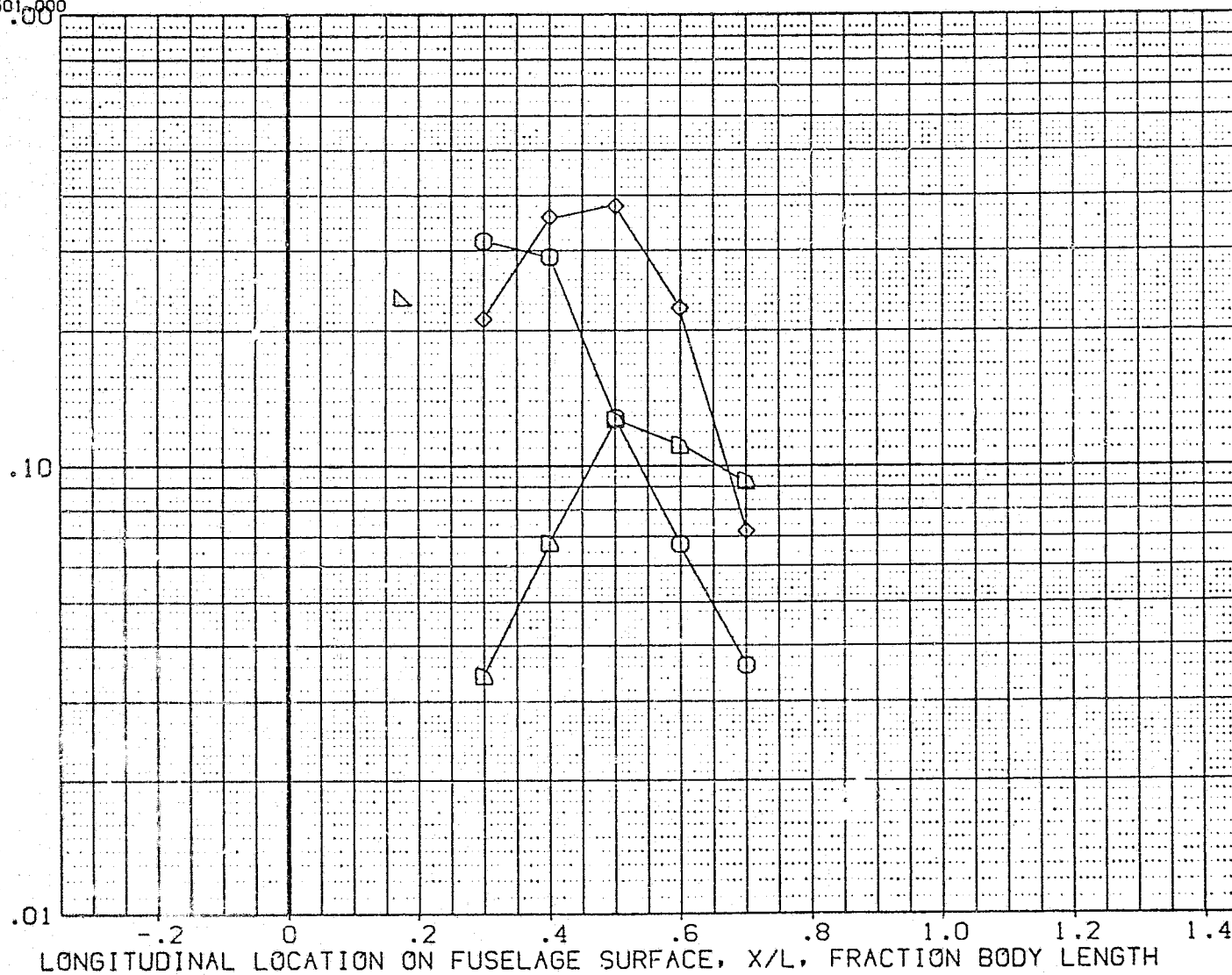


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE(RQSU04)

SYMBOL

Z(WL)

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

35.000

BETA

.000

MACH

6.000

ALPHAS

35.000

PHI

.000

PHIS

.000

○
 □
 ◇
 △

375.000
 400.000
 425.000
 465.000
 472.900
 501.000
 1.00

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

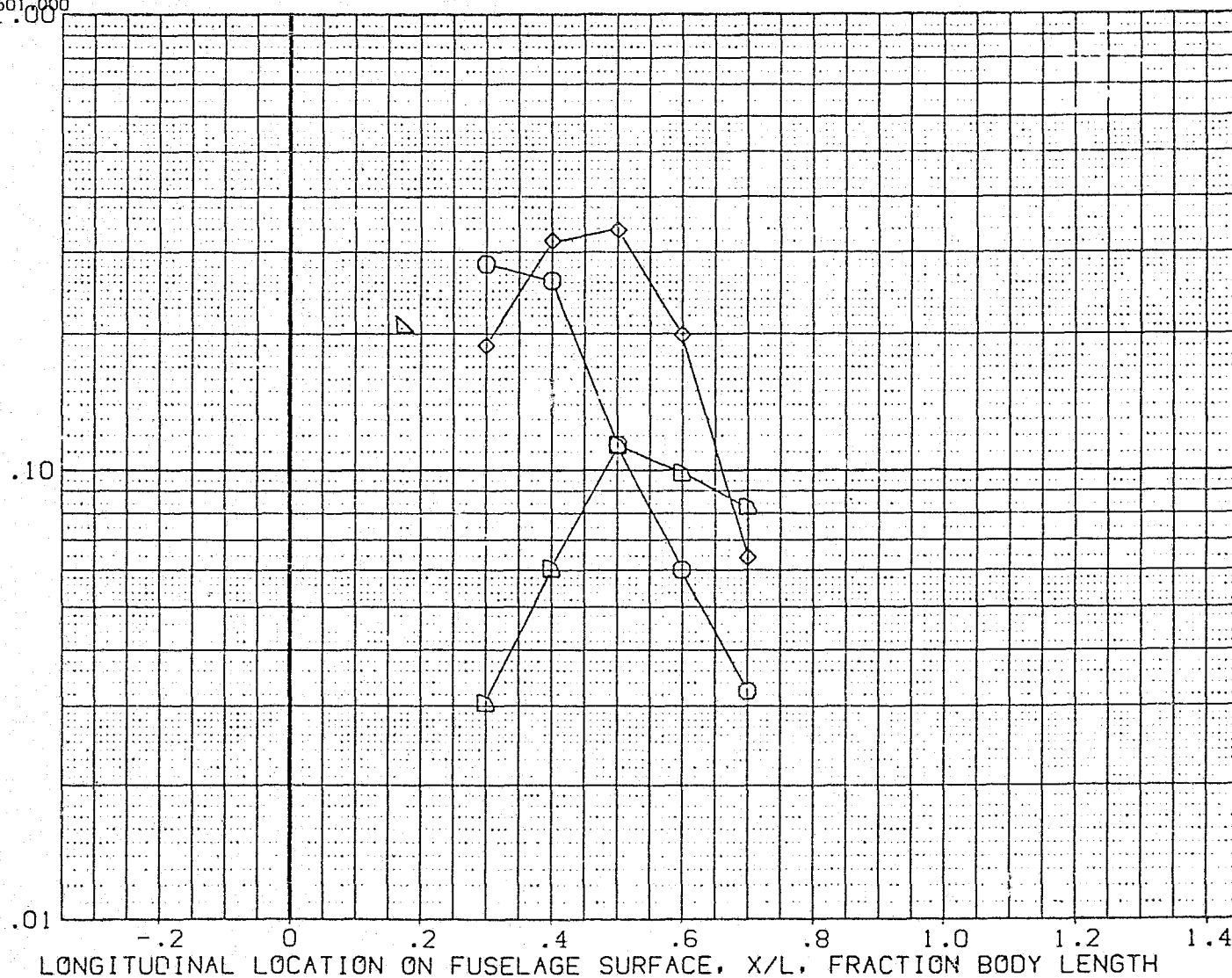


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU04)

SYMBOL

Z(WL)

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

35.000

BETA

.000

MACH

6.000

ALPHAS

35.000

PHI

.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

\square \diamond \square \square
 \square \diamond \square \square

375.000
 400.000
 425.000
 465.000
 472.900
 501.000
 1.000

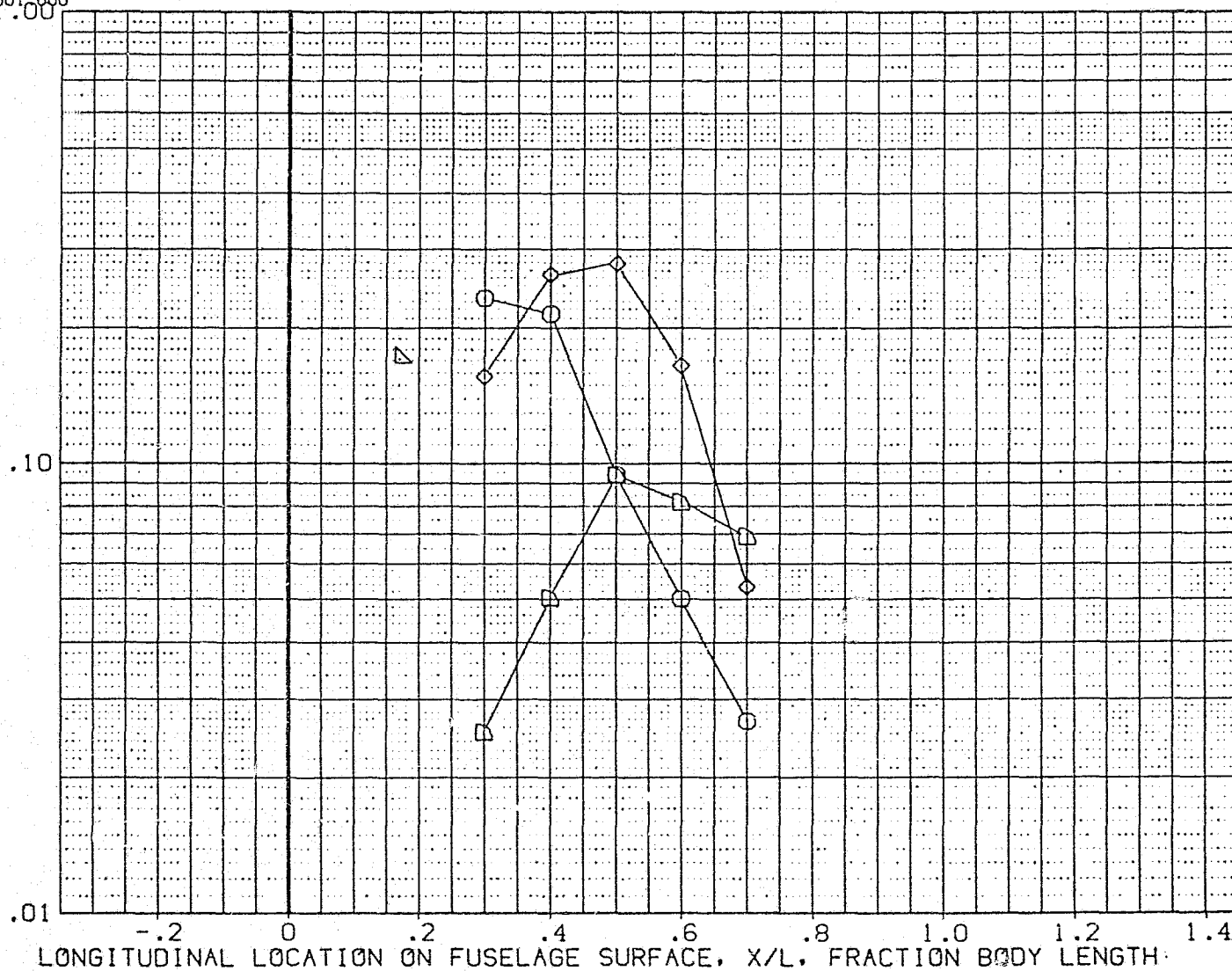


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU06)

SYMBOL

Z(WL)

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

375.000
 400.000
 425.000
 465.000
 472.900
 501.000
 1.00

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

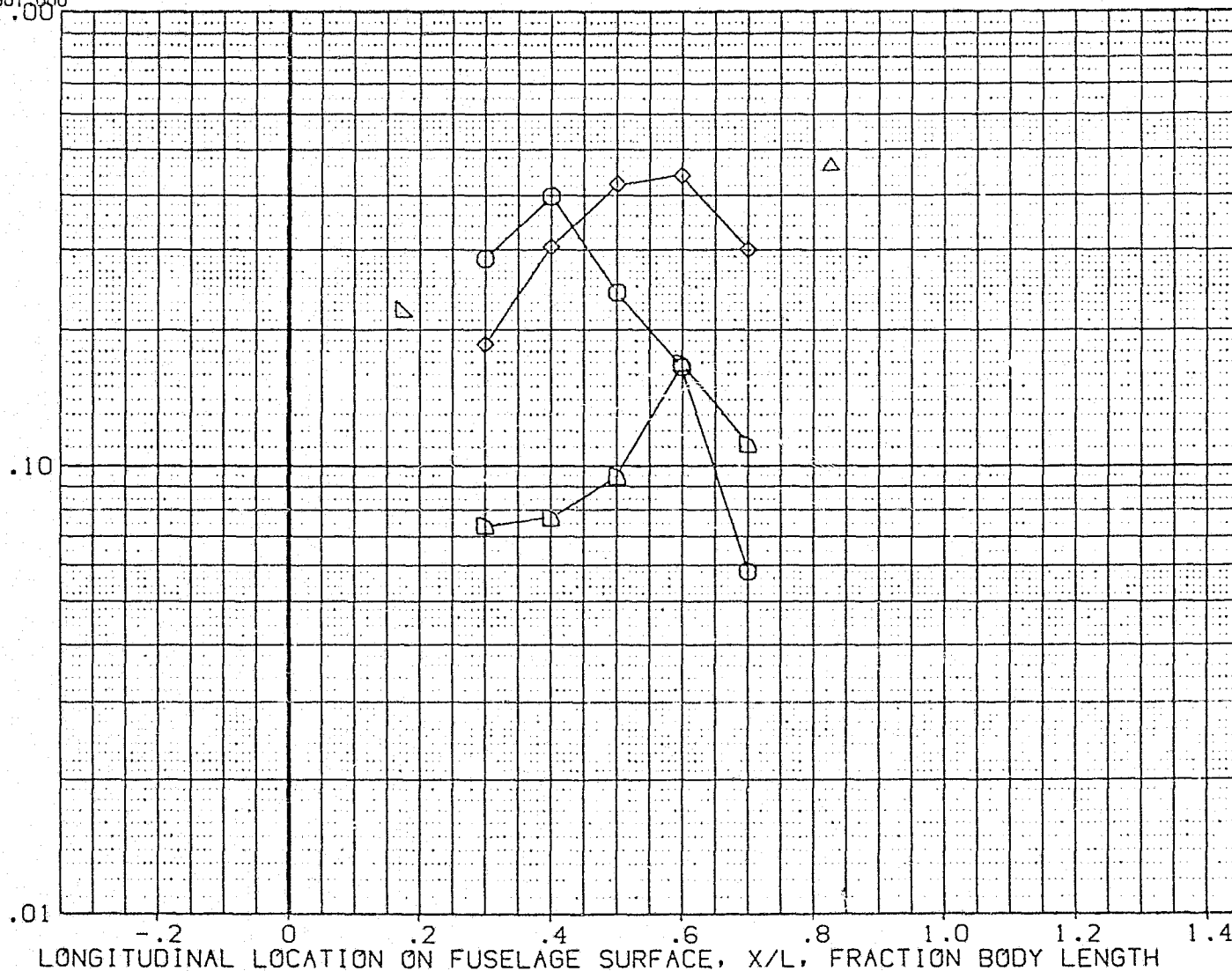


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU06)

SYMBOL

Z(WL)

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

○
 □
 ◇
 ▽
 ▴
 △
 ▲

375.000
 400.000
 425.000
 465.000
 472.900
 501.000
 1.00

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

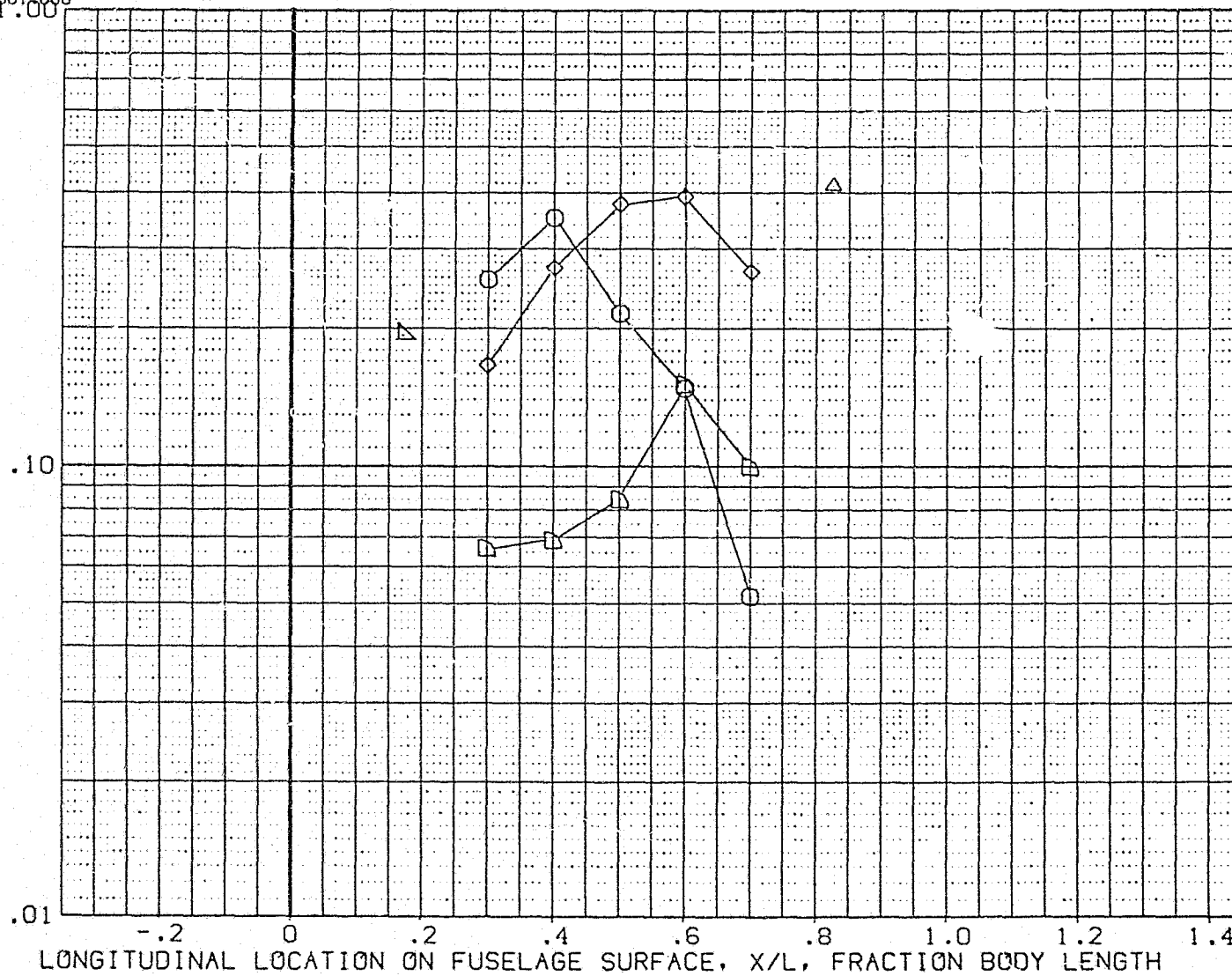


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

OH45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU06)

SYMBOL

Z(WL)

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

375.000
 400.000
 425.000
 465.000
 472.900
 501.000
 1.00

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

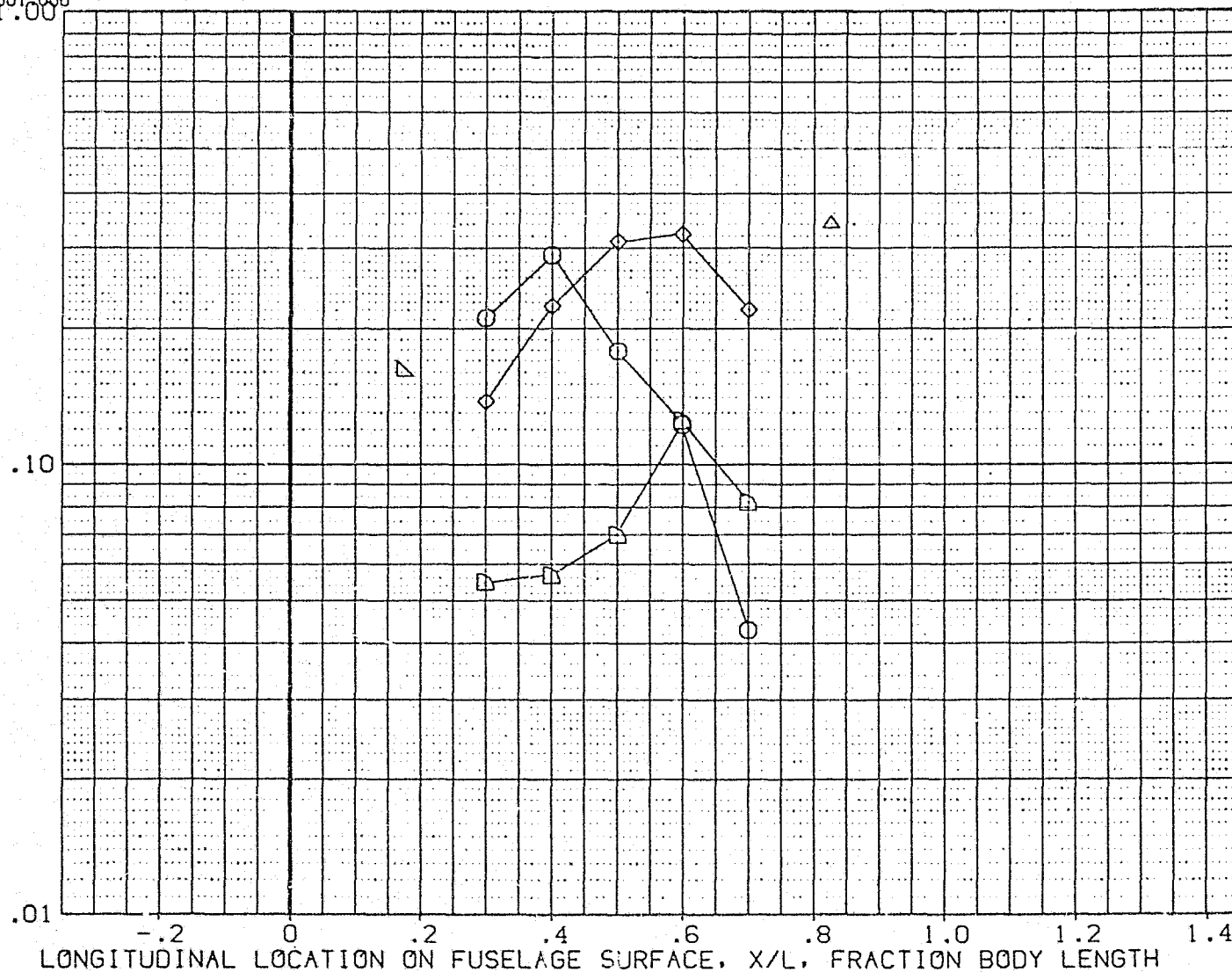


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU06)

SYMBOL	Z(WL)	HAW/HT	RN/L
◇	375.000	.850	5.313
○	400.000		
□	425.000		
△	465.000		
	472.900		
	501.000		
	1.00		

PARAMETRIC VALUES		
ALPHA	30.000	BETA .000
MACH	6.000	ALPHAS 30.000
PHI	.000	PHIS .000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

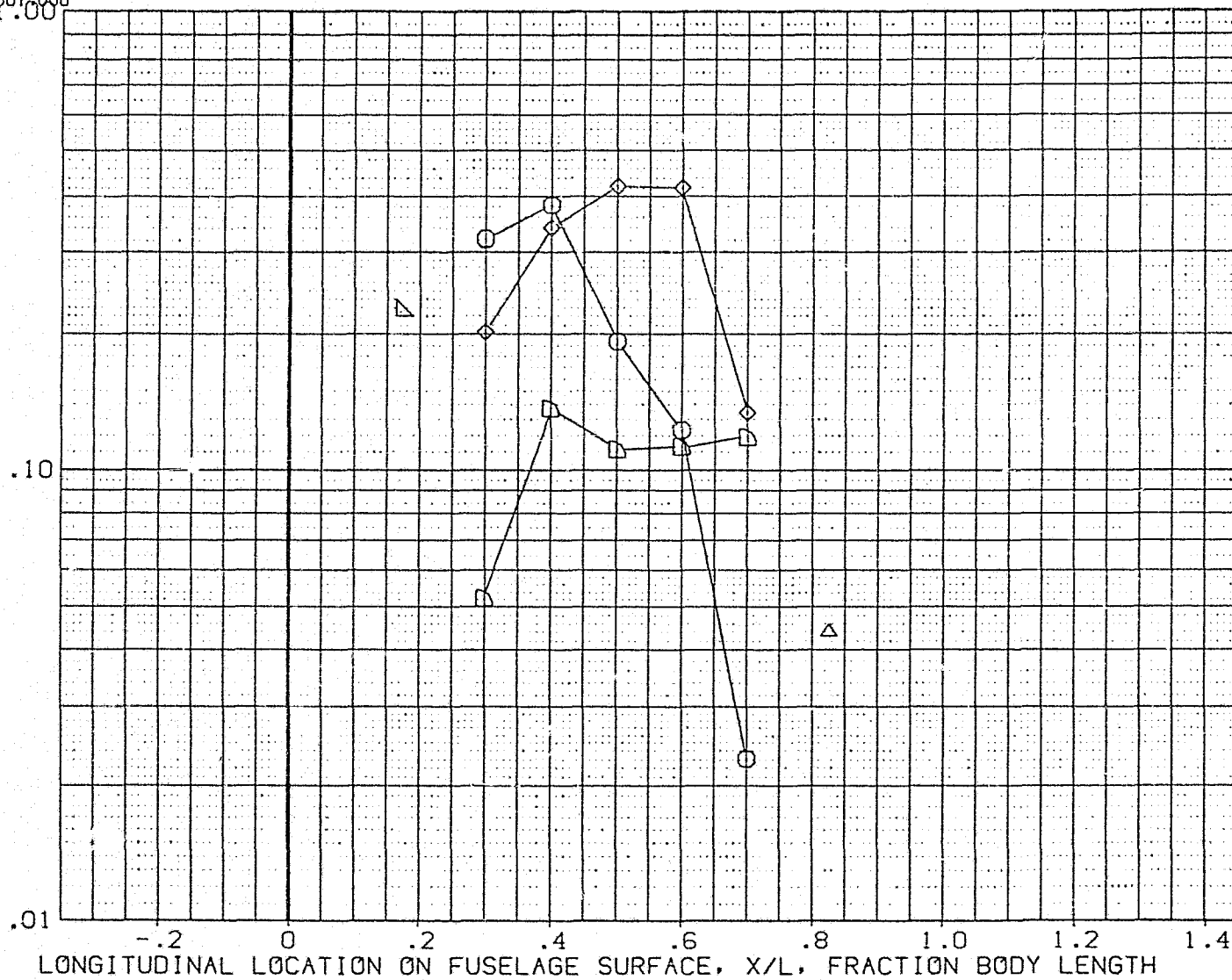


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU06)

SYMBOL

X/L

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

125.000

400.000

425.000

465.000

472.900

501.000

1.00

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

\square \diamond \square \square
 \square \diamond \square \square
 \square \diamond \square \square
 \square \diamond \square \square
 \square \diamond \square \square
 \square \diamond \square \square

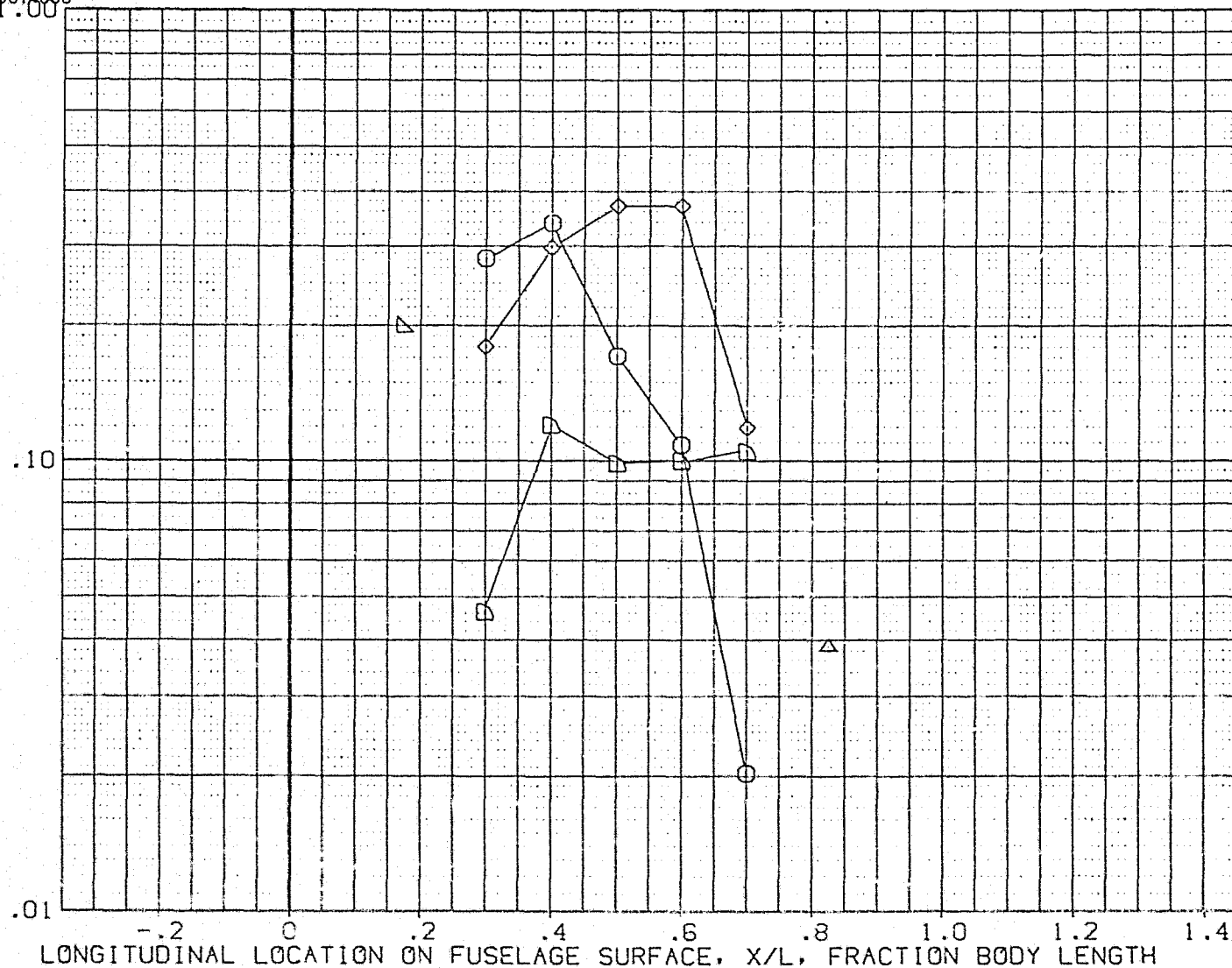


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU06)

SYMBOL

Z(WL)

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

375.000

1.000

5.313

400.000

425.000

465.000

472.900

501.000

1.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

\square \triangle \diamond \square \square
 \square \triangle \diamond \square \square

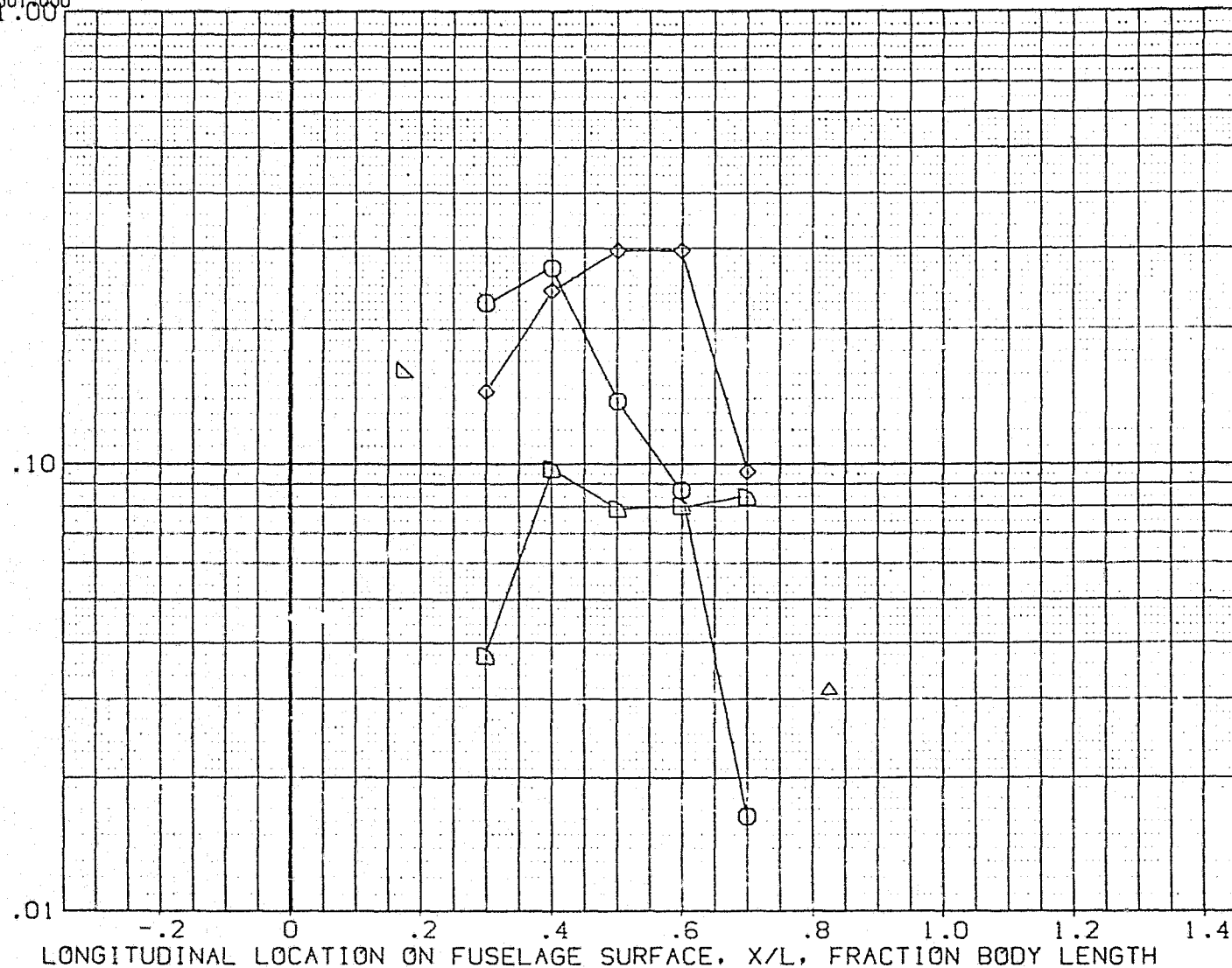


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU08)

SYMBOL

Z(WL)

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

30.300

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

\square \triangle \diamond \square \square
 \square \triangle \diamond \square \square

375.000
 400.000
 425.000
 465.000
 472.900
 501.000
 1.00

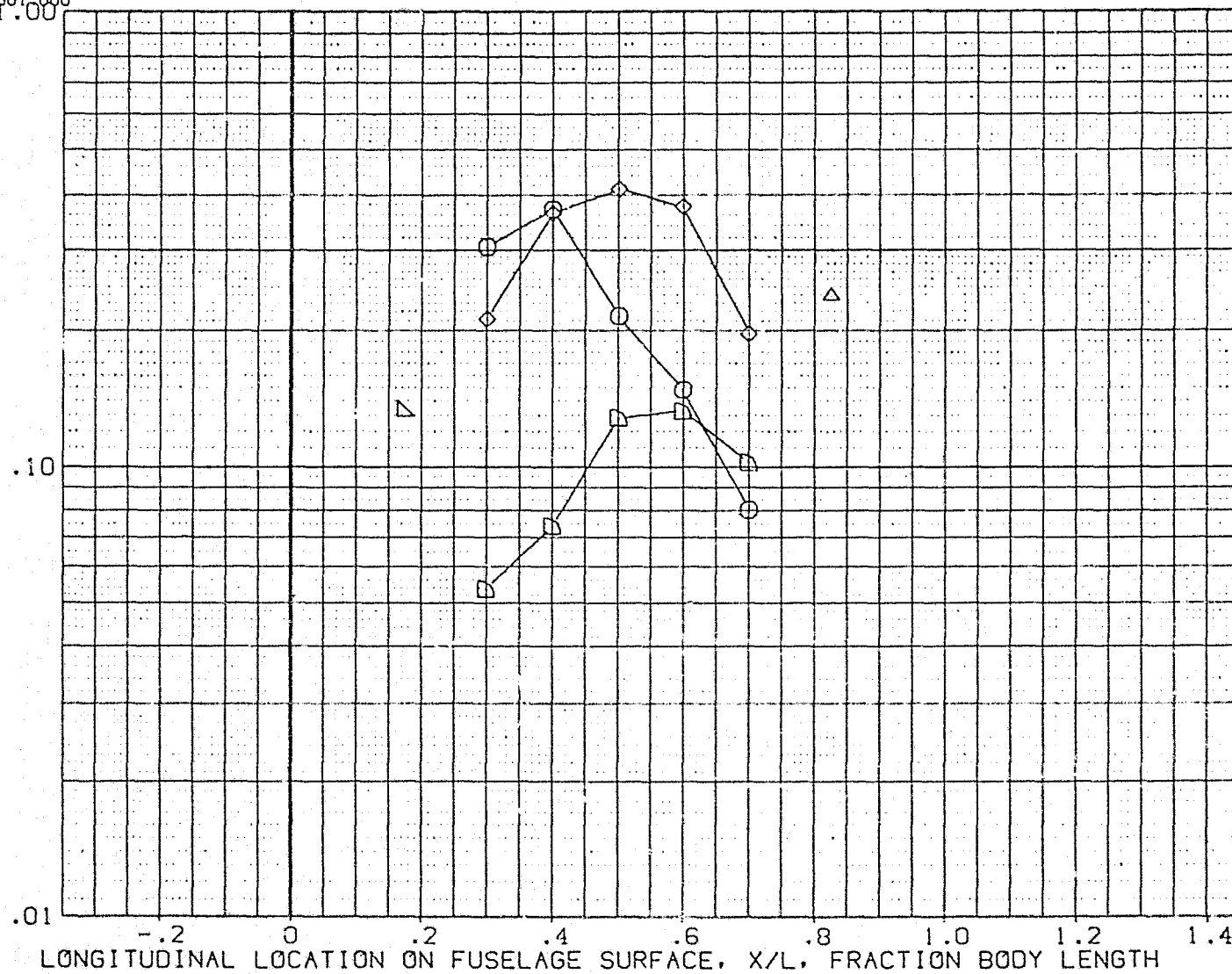


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

SYMBOL

ZCWLJ

NAVJAG

RN/L

PARAMETRIC VALUES

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{ref}

501.000
1.000

10

.01

LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH

FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE(RQSU08)

SYMBOL

Z(WL)

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

375.000
400.000
425.000
465.000
472.900
501.000
1.000

□
◇
△
▽
○

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

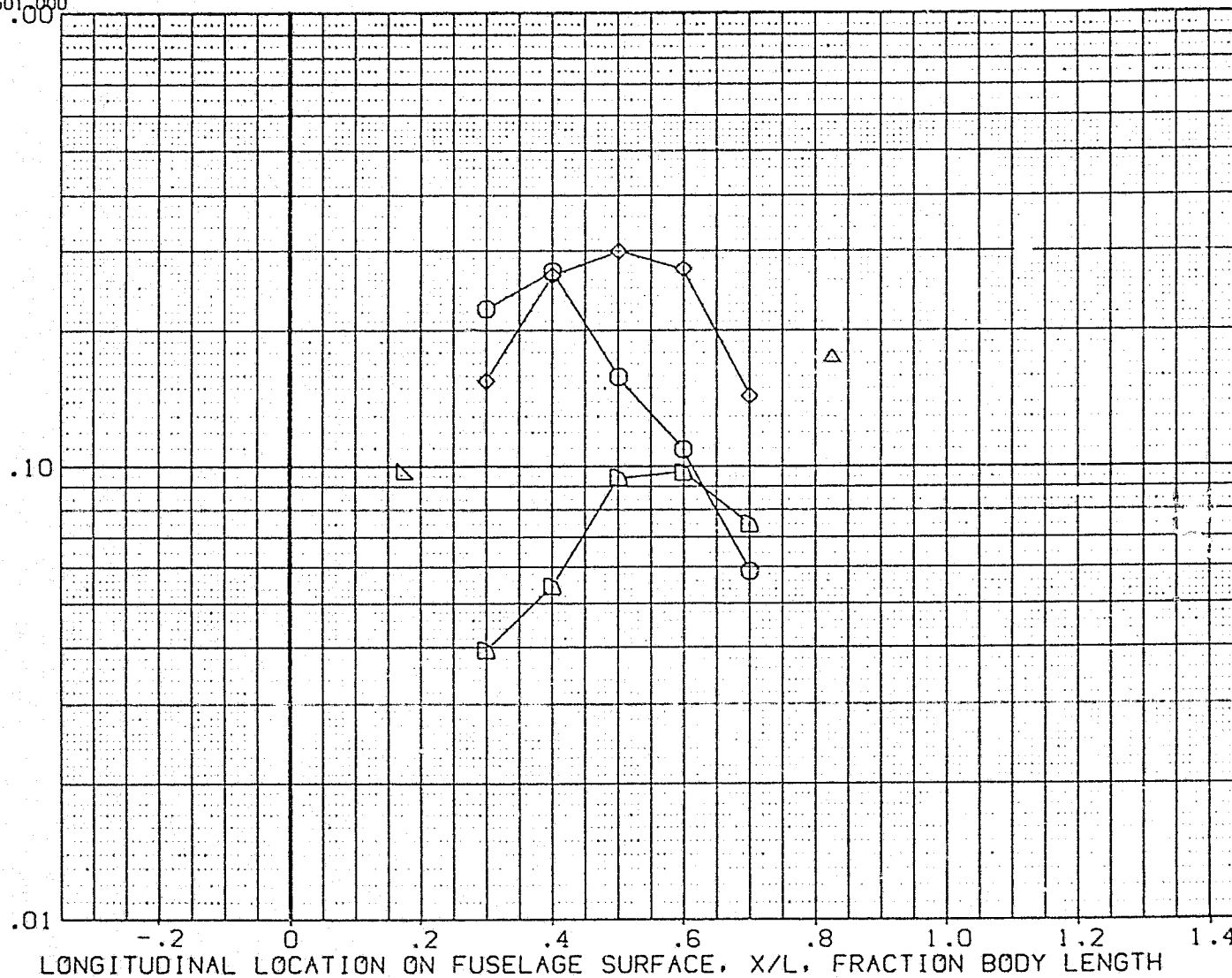


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU08)

PARAMETRIC VALUES

1.000

30,000

.000

.850	5.244
------	-------

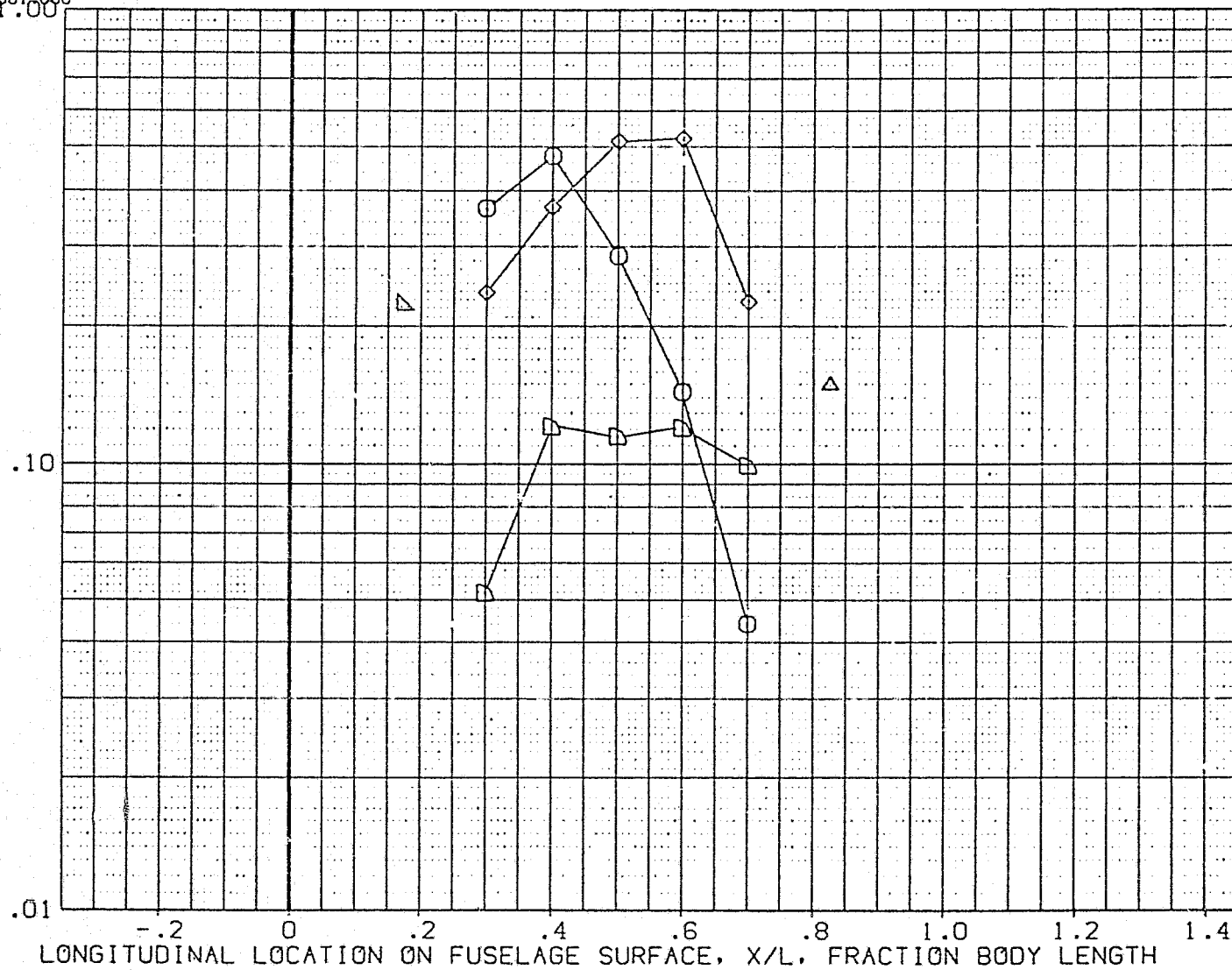
$$\text{RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, } h/h_{\text{REF}}$$


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45 .B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU08)

SYMBOL

375.000
400.000
425.000
465.000
472.900
501.000
1.00

HAW/HT
.900

RN/L
5.244

ALPHA
MACH
PHI

PARAMETRIC VALUES

30.000 BETA 1.000
6.000 ALPHAS 30.000
-2.000 PHIS .000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

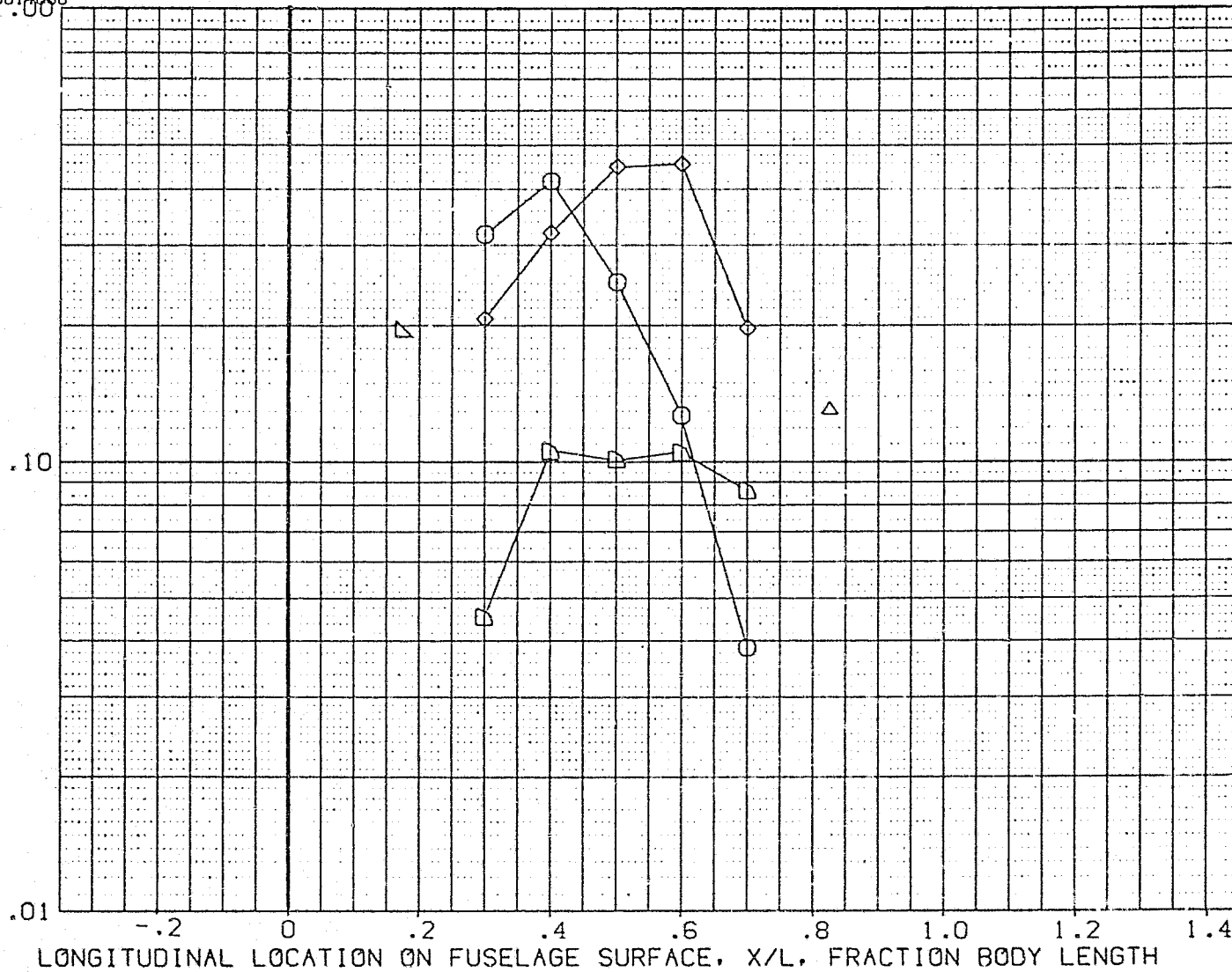


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RGSU08)

SYMBOL

Z(WL)

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA	30.000	BETA	1.000
MACH	6.000	ALPHAS	30.000
PHI	-2.000	PHIS	.000

375.000	1.000	5.244
400.000		
425.000		
465.000		
472.900		
501.000		
1.00		

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

O
 □
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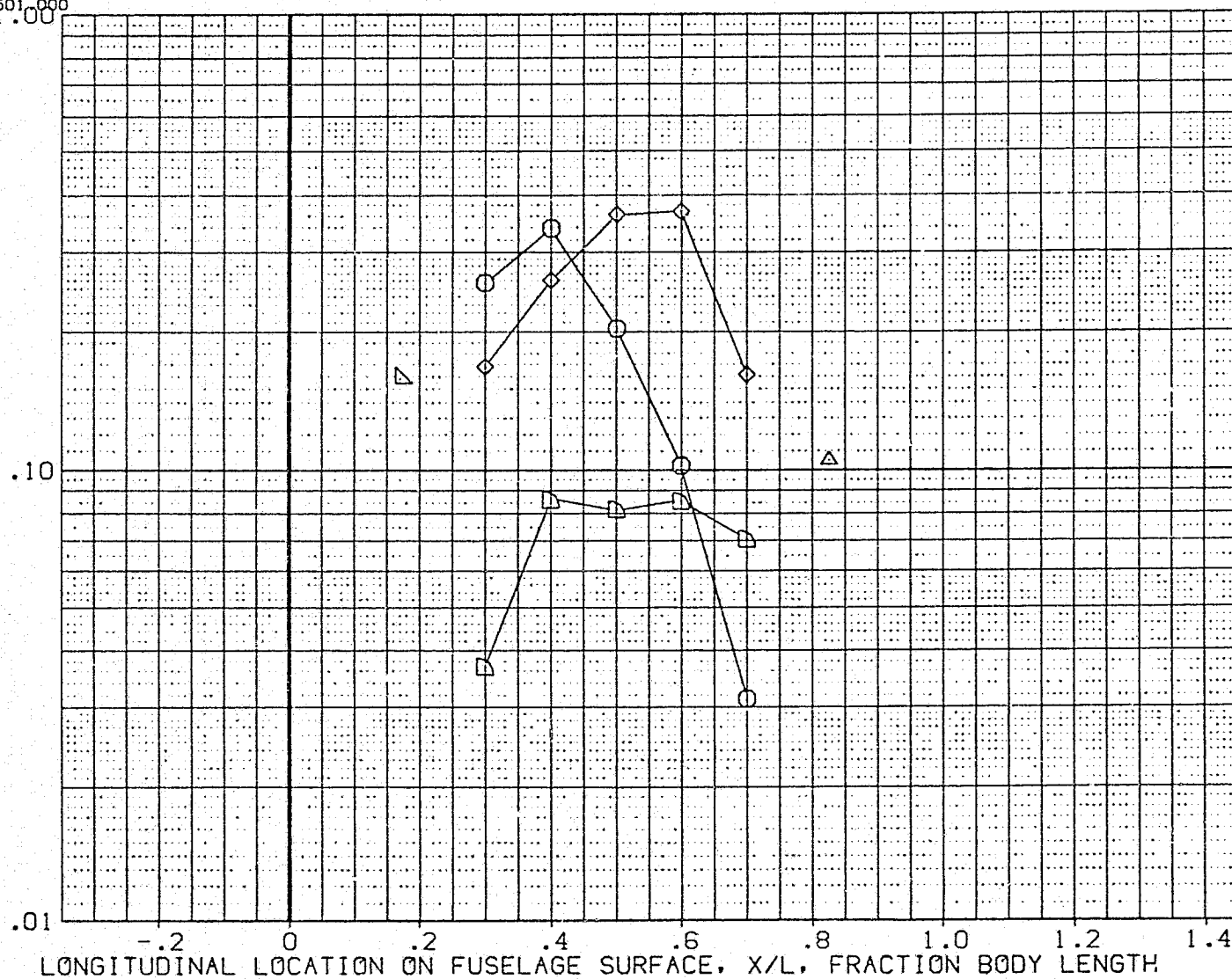


FIG 8 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SU02)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	25.000	.000	6.000
(R0SU04)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	35.000	.000	6.000
(R0SU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

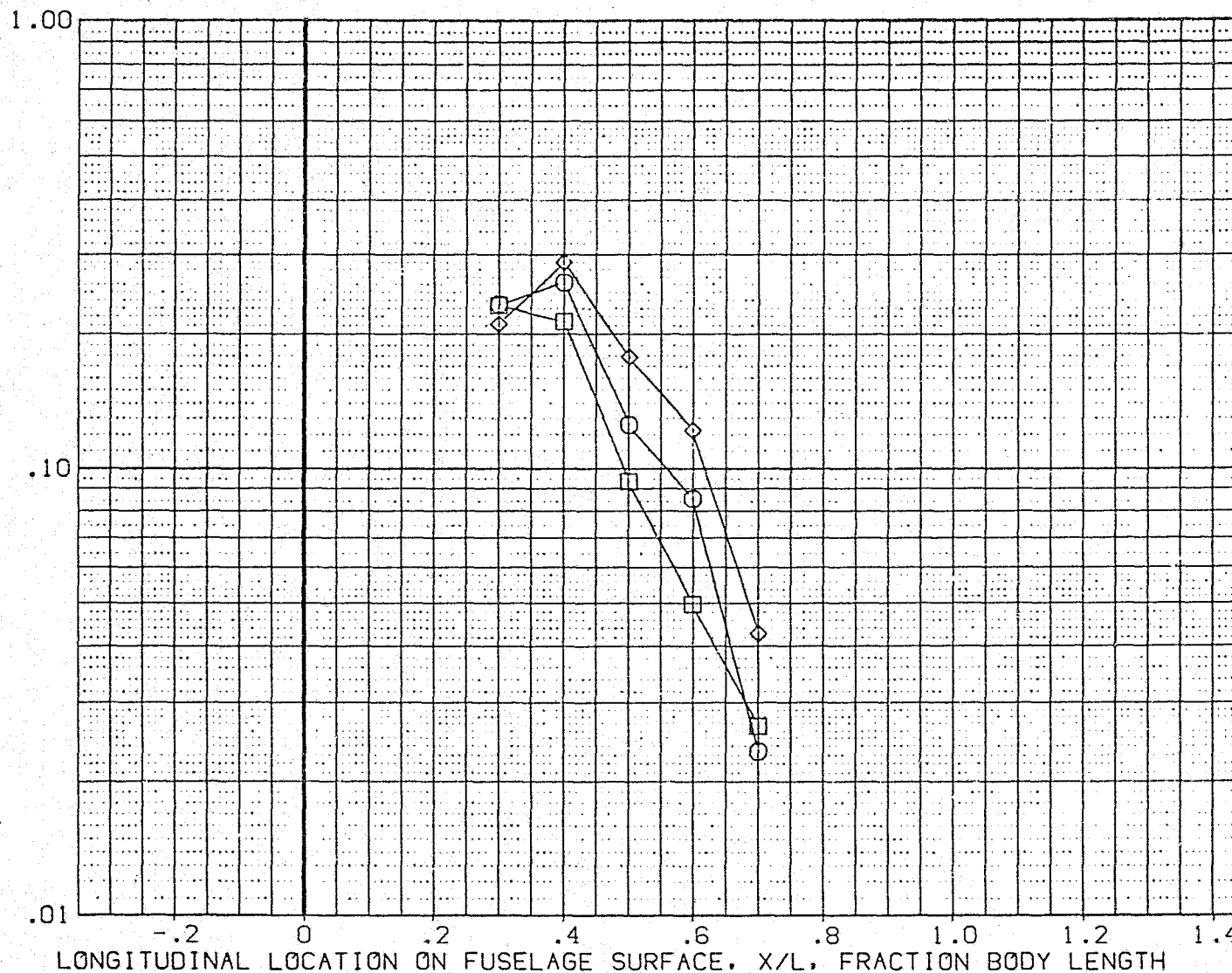


FIG 9 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/ANGLE OF ATTACK

RN/L = 3.034 HAW/HT= 1.000 Z(WL) = 375.000

PAGE 55

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU02)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	25.000	.000	6.000
(RQSU04)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	35.000	.000	6.000
(RQSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

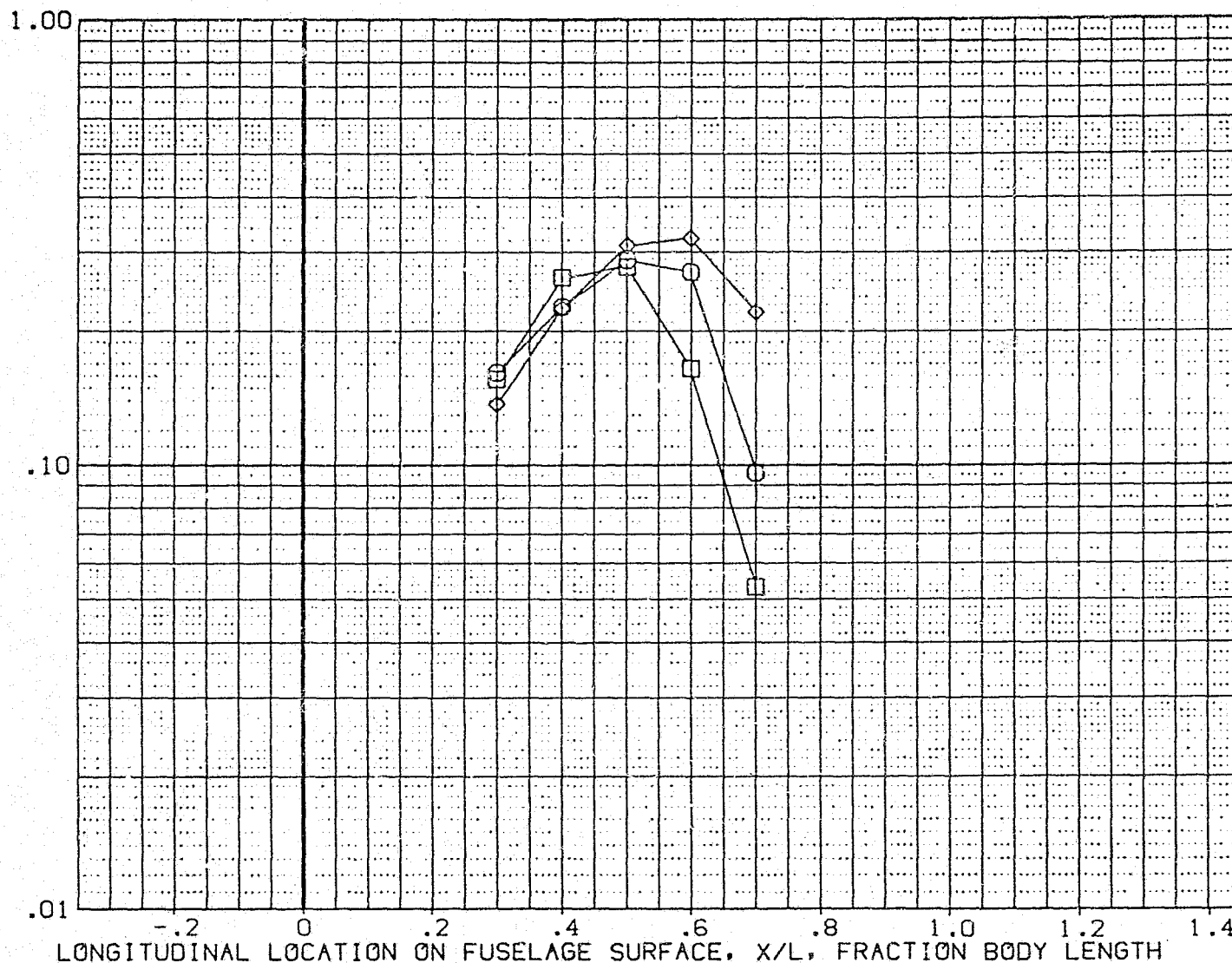


FIG 9 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/ANGLE OF ATTACK

RN/L = 3.034 HAW/HT= 1.000 Z(WL) = 425.000

PAGE 56

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU02)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	25.000	.000	6.000
(RQSU04)	DATA NOT AVAILABLE	35.000	.000	6.000
(RQSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

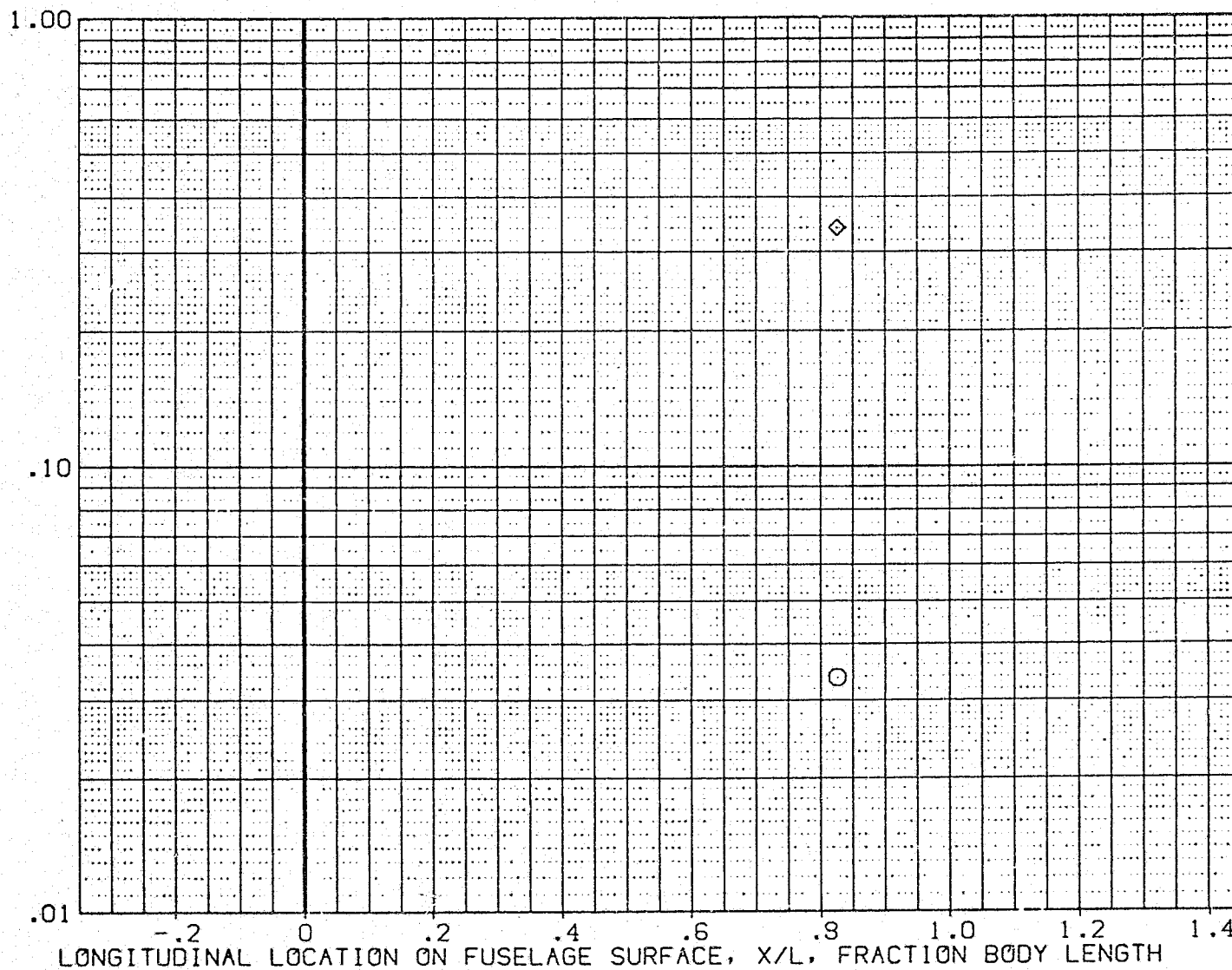


FIG 9 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/ANGLE OF ATTACK

RN/L = 3.034 HAW/HT= 1.000 Z(WL) = 465.000

PAGE 57

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SU02)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	25.000	.000	6.000
(R3SU04)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	35.000	.000	6.000
(R0SU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000

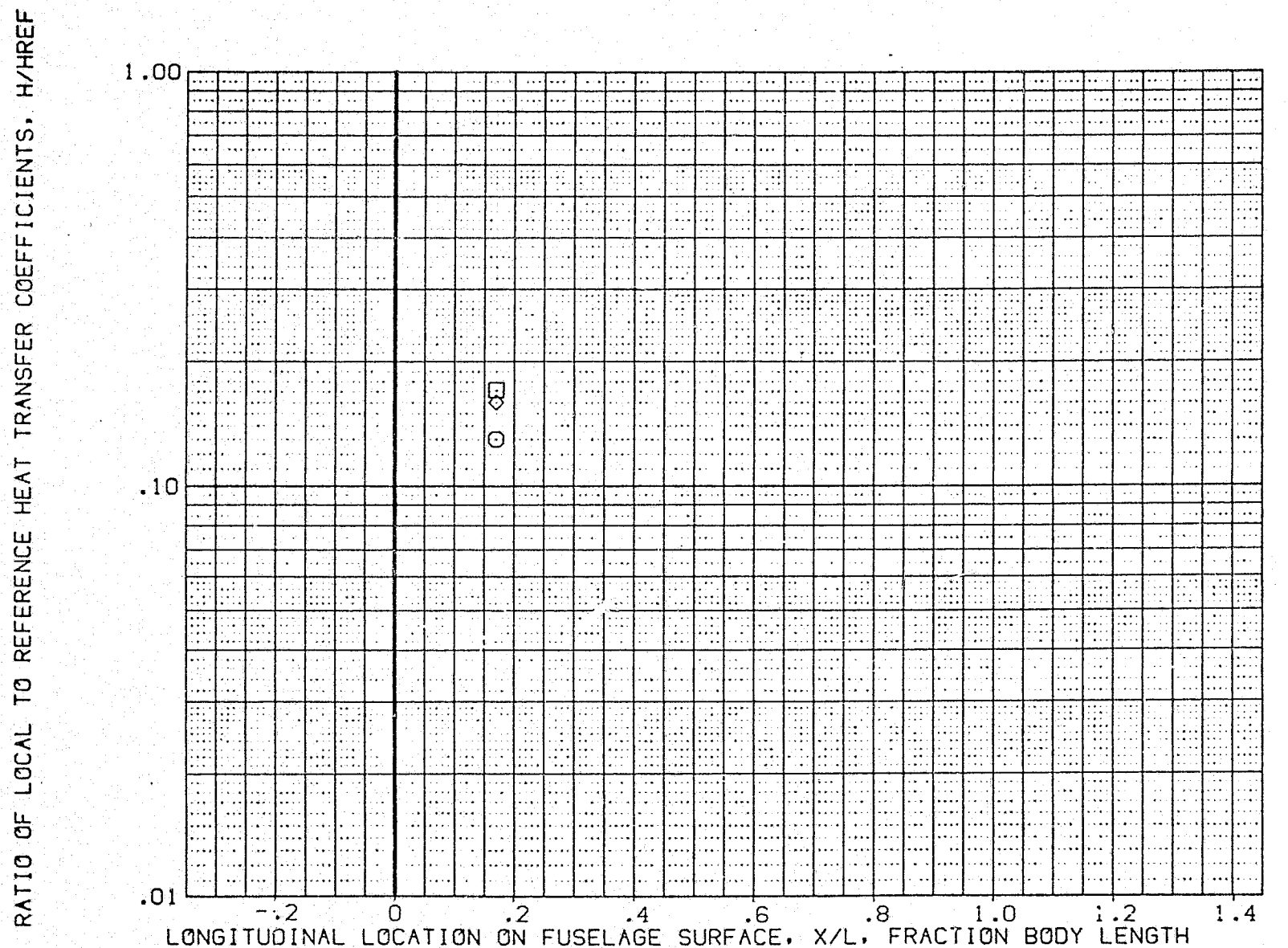


FIG 9 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/ANGLE OF ATTACK

RN/L = 3.034 HAW/HT= 1.000 Z(WL) = 472.900

PAGE 58

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SU02)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	25.000	.000	6.000
(R0SU04)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	35.000	.000	6.000
(R0SU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000

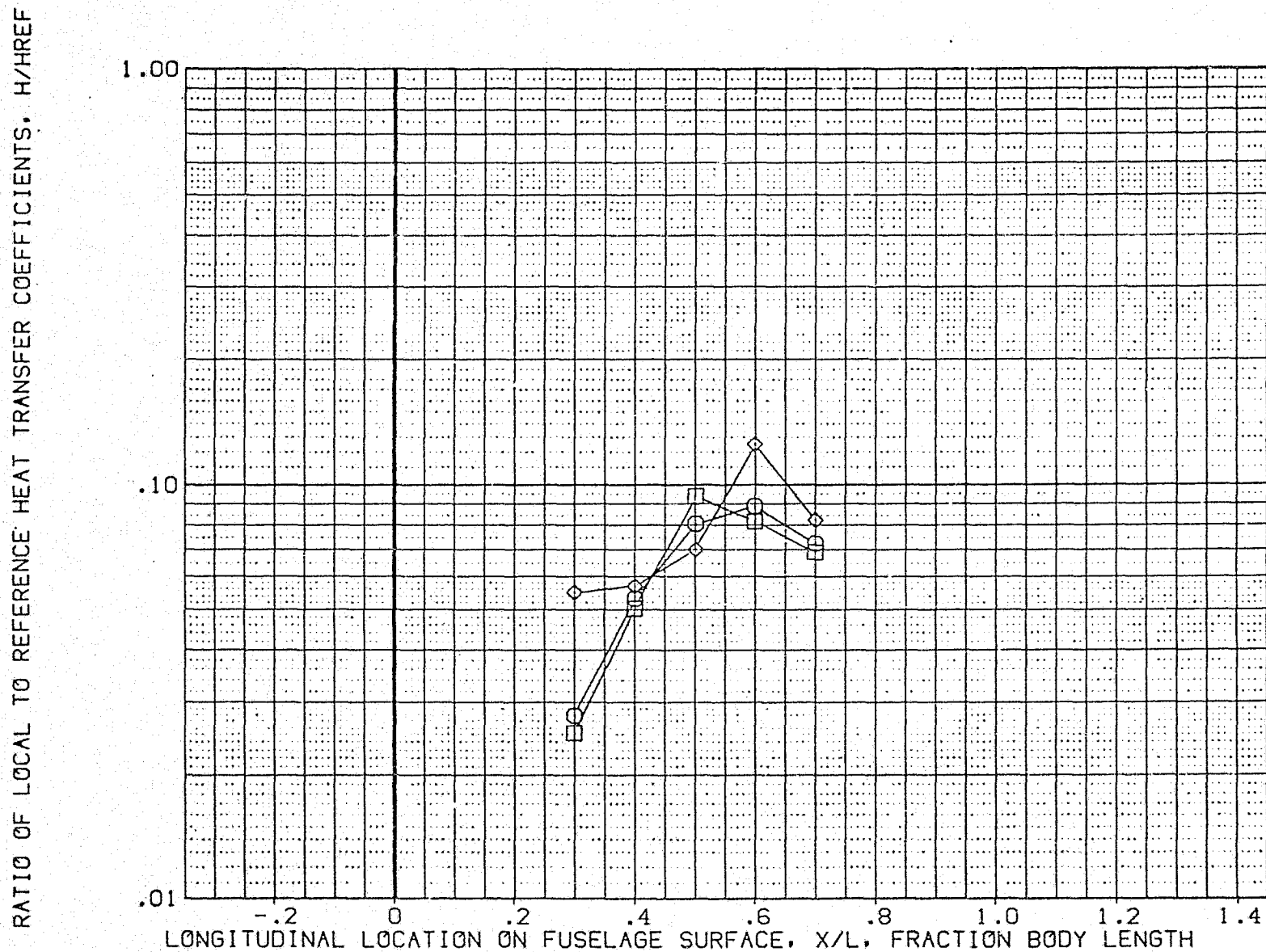


FIG 9 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/ANGLE OF ATTACK

RN/L = 3.034 HAW/HT= 1.000 Z(WL) = 501.000

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(ROSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(ROSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

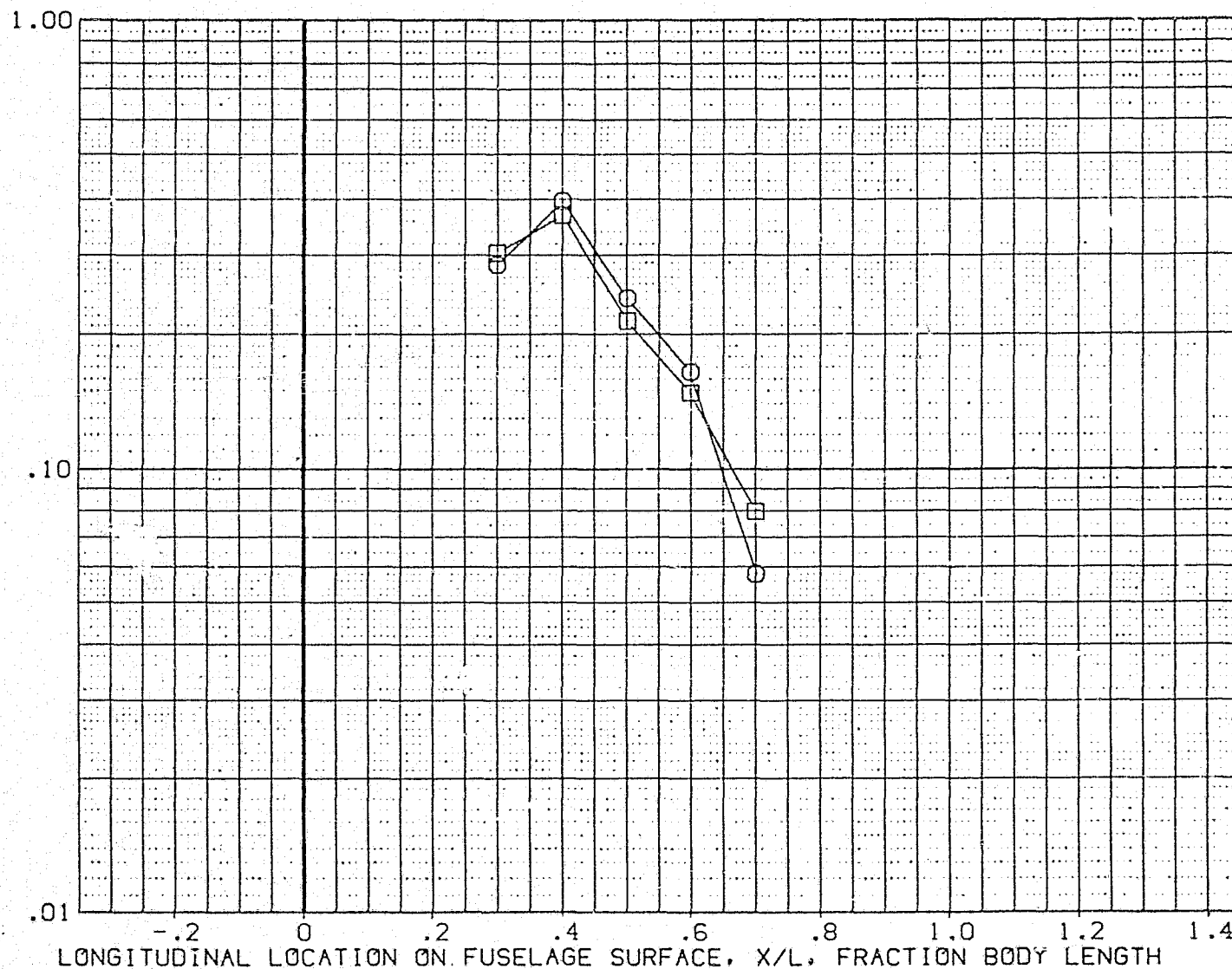


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT = .850 Z(WL) = 375.000

PAGE 60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(R0SU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

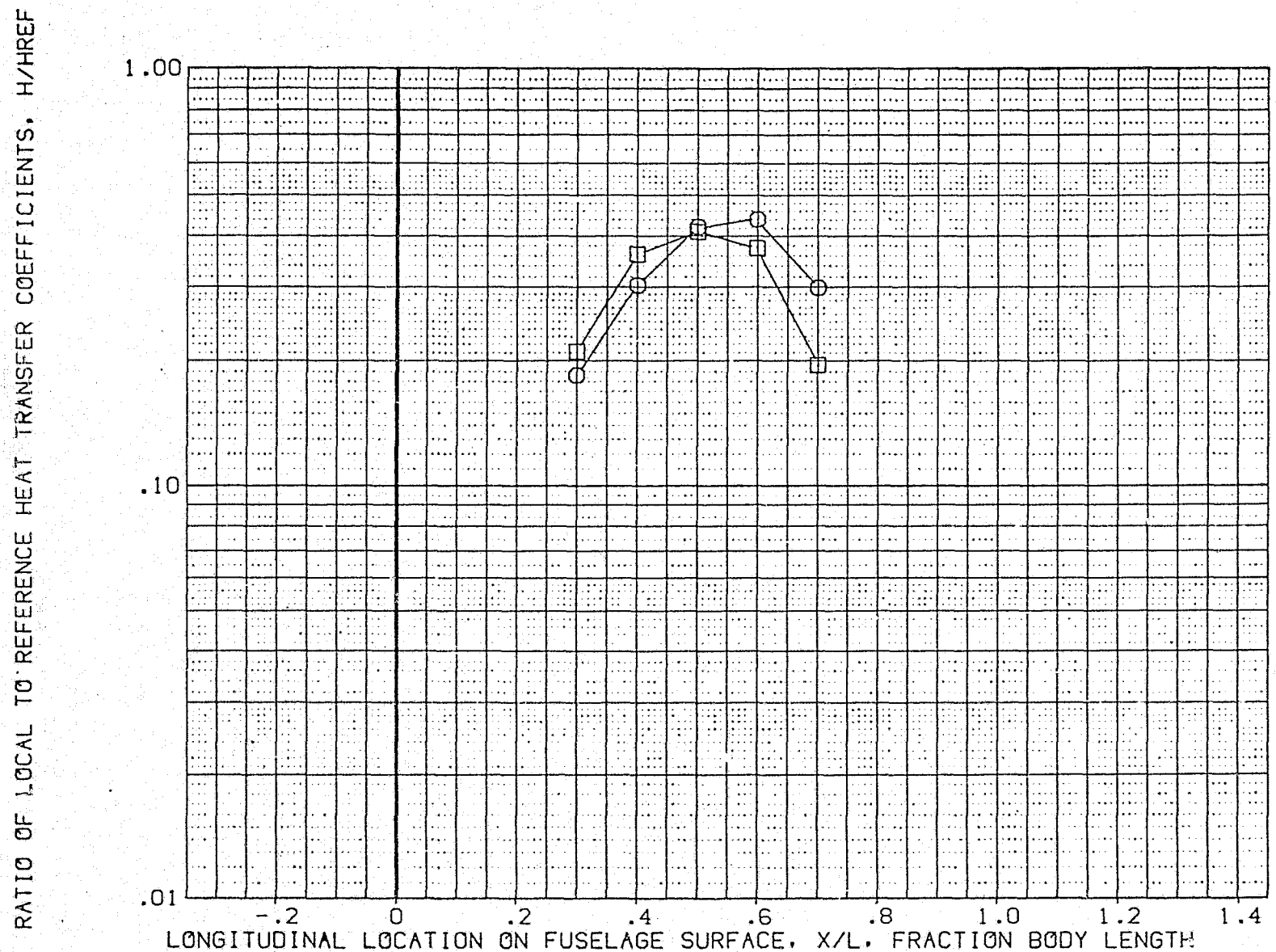


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT = .850 Z(WL) = 425.000

PAGE 61

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RQSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

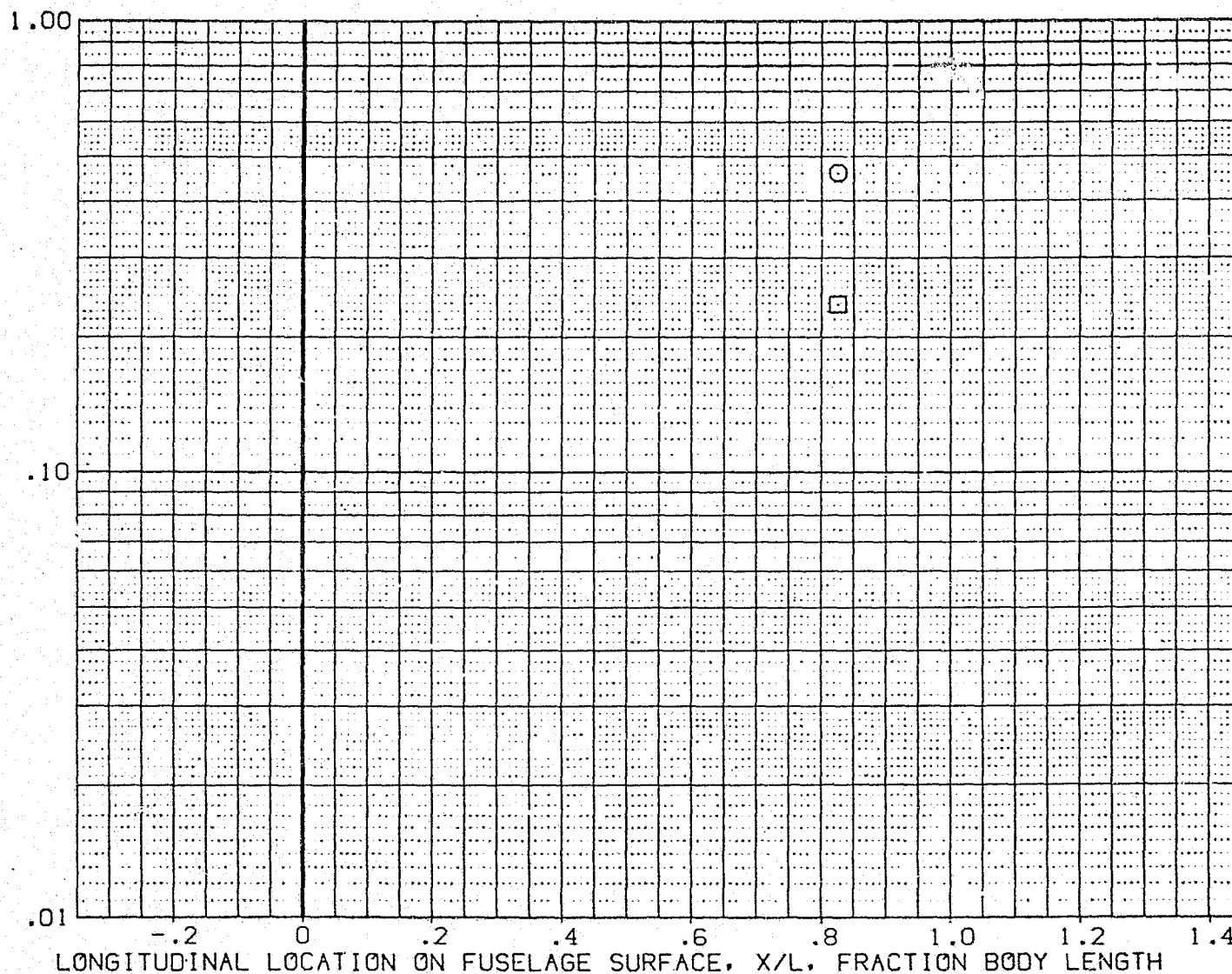


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR. α /SIDESLIP ANGLE

RN/L = 2.987 HAW/HT = .850 Z(WL) = 465.000

PAGE 62

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RQSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

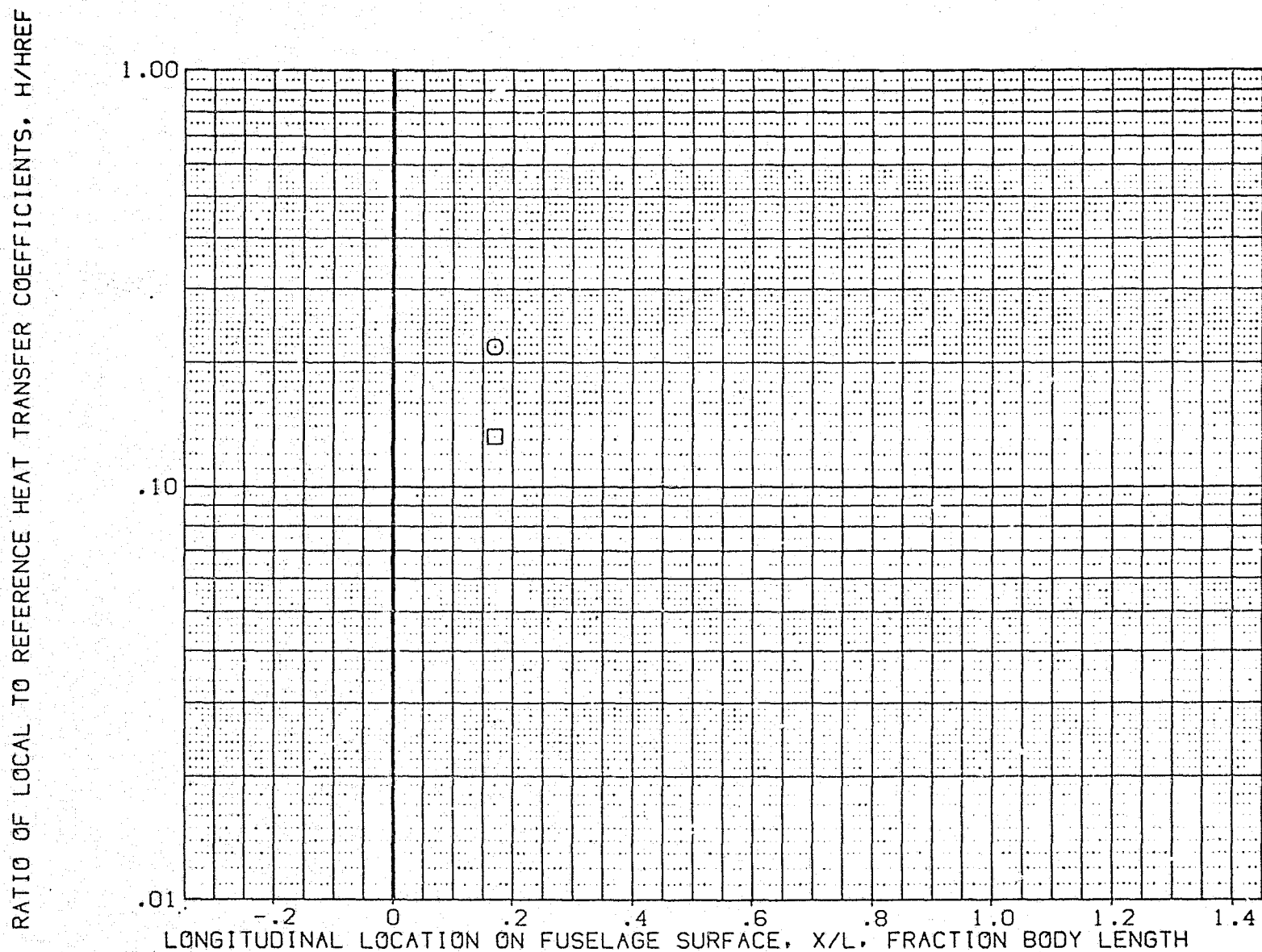


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT= .850 Z(WL) = 472.900

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RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

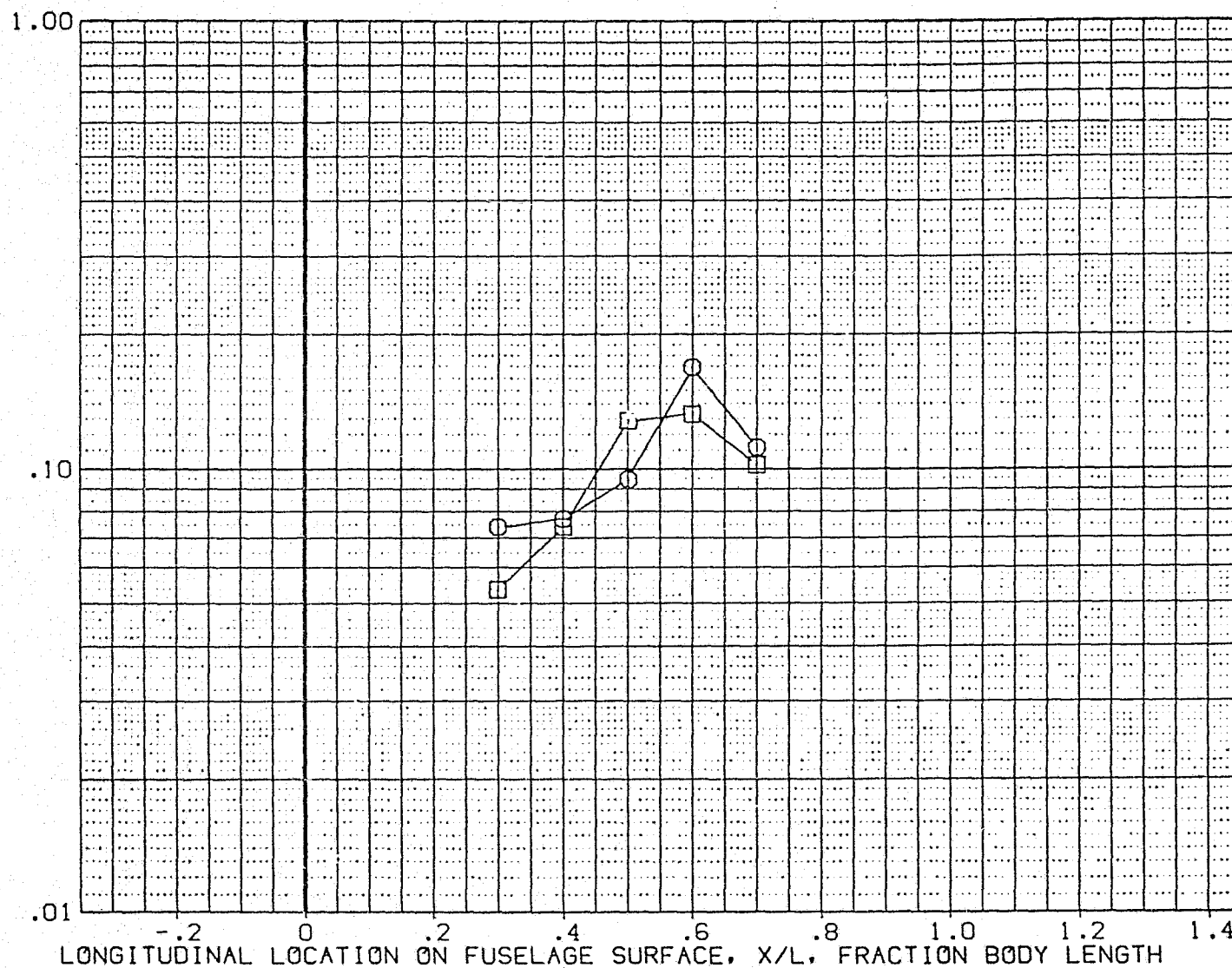


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT= .850 Z(WL) = 501.000

PAGE 64

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(R0SU08)	OH45 B22C7V111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

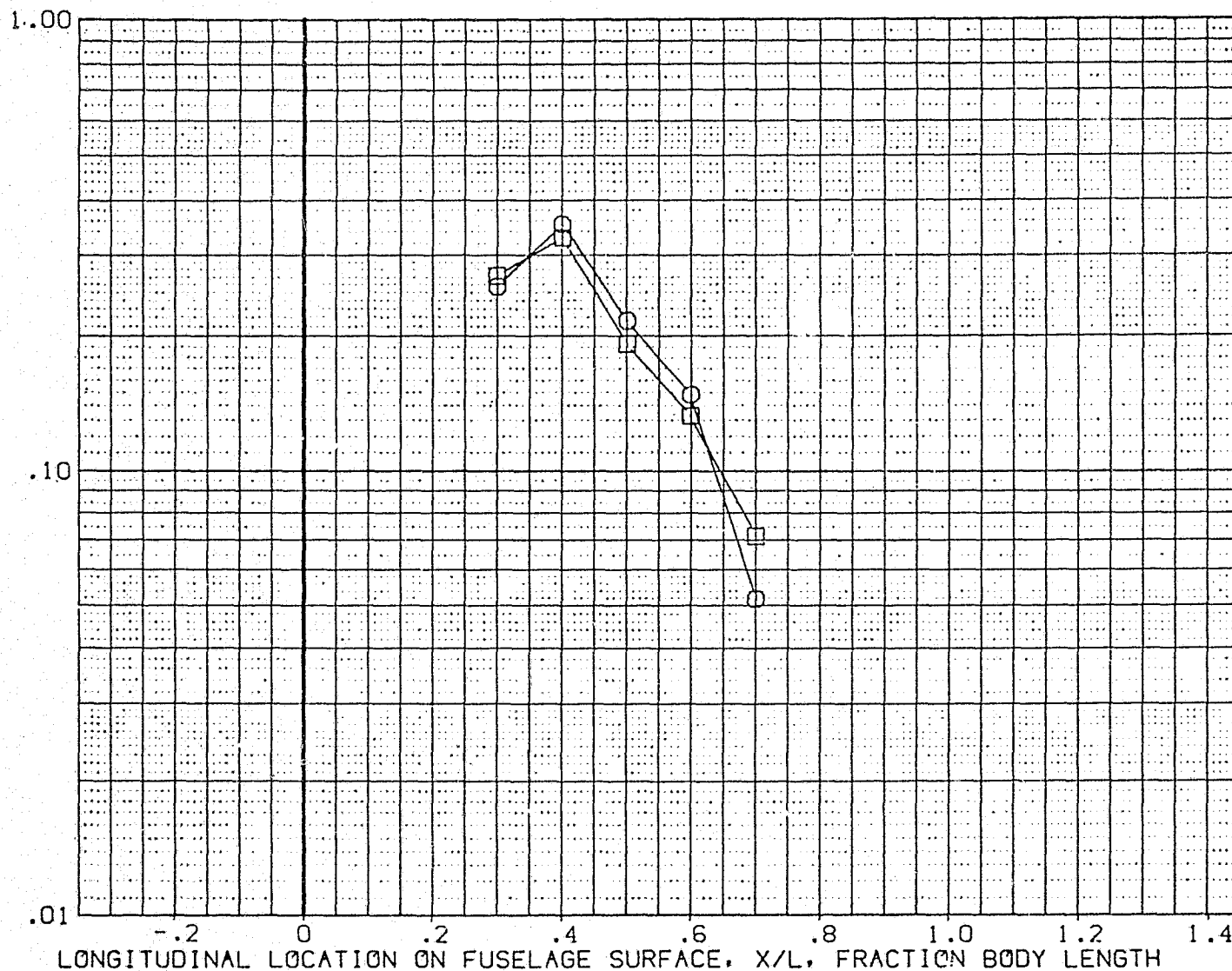


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT= .900 Z(WL) = 375.000

PAGE 65

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU06)	0H45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RQSU08)	0H45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

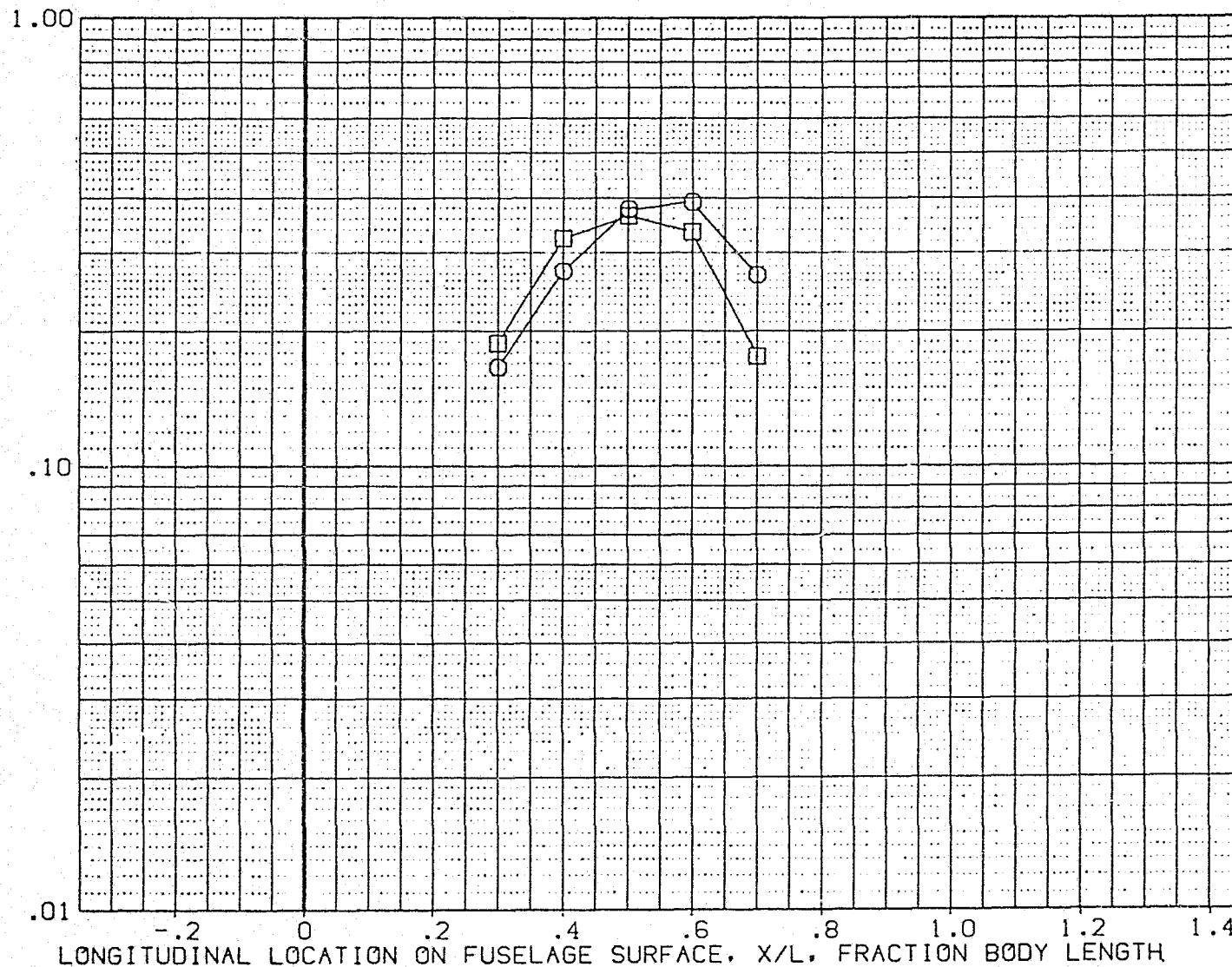




FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT= .900 Z(WL) = 425.000

PAGE 66

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RDSU06) 	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RDSU08) 	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

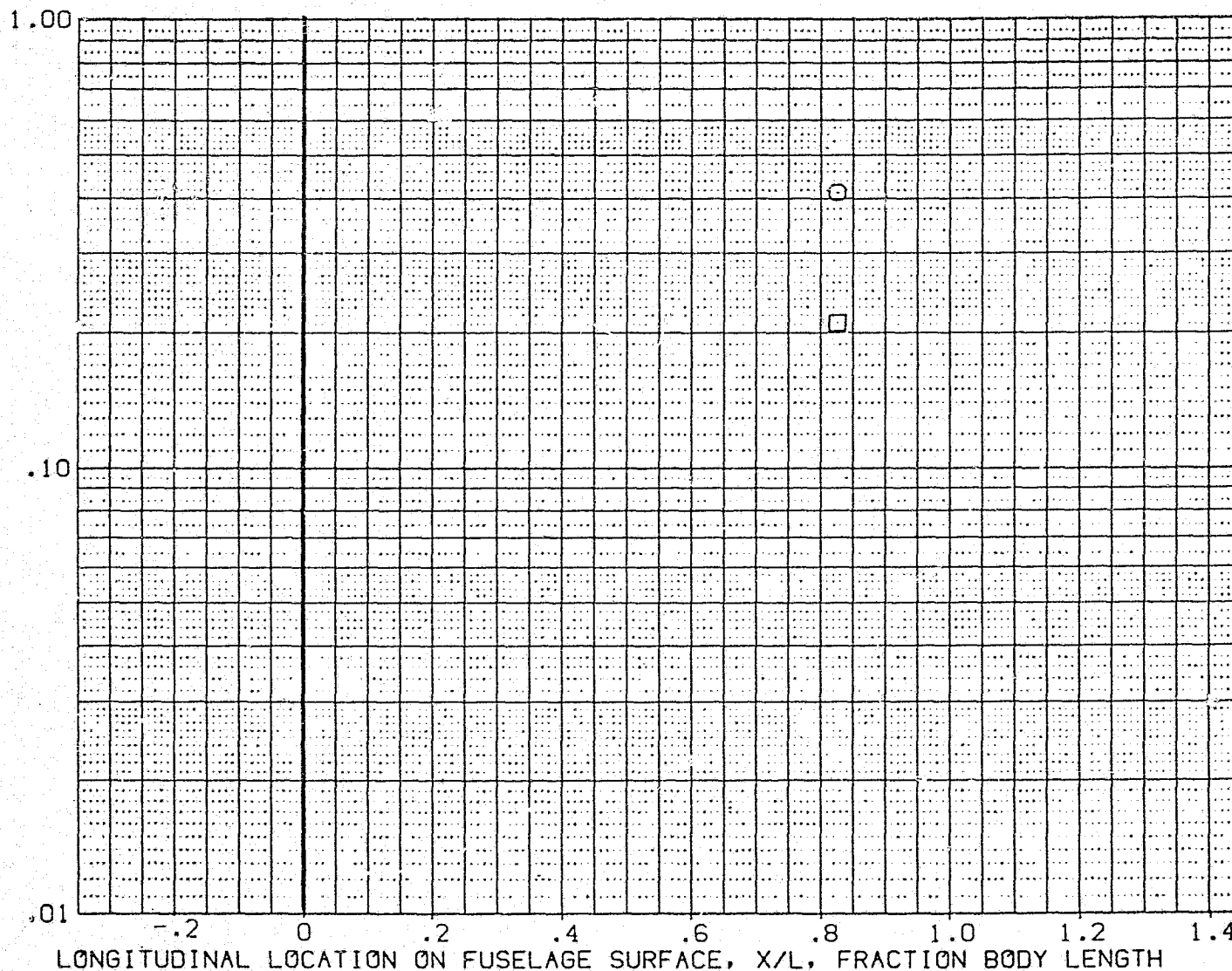


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT= .900 Z(WL) = 465.000

PAGE 67

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RQSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

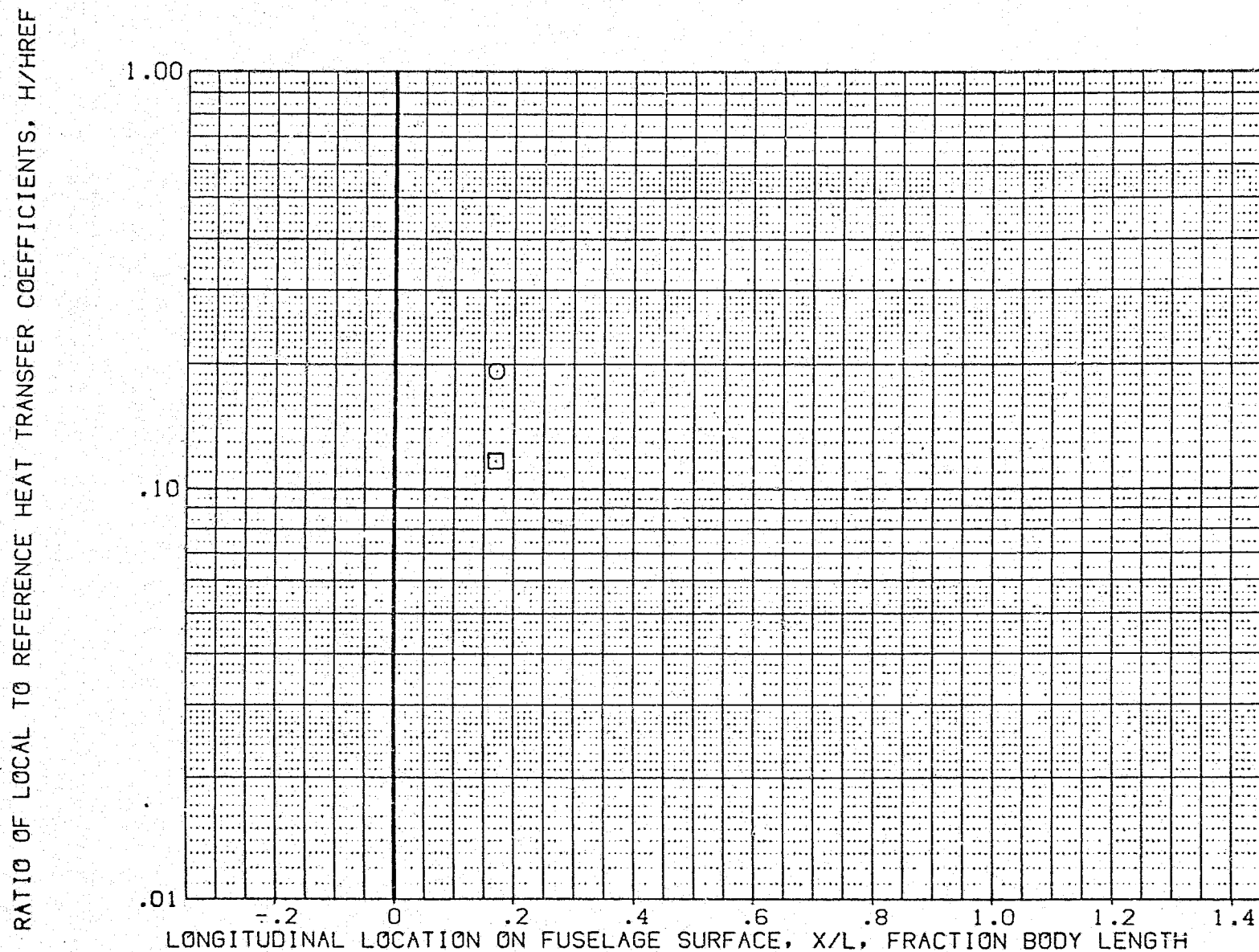


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDSLIP ANGLE

RN/L = 2.987 HAW/HT = .900 Z(WL) = 472.900

PAGE 68

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RGSU06)	CH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RGSU08)	CH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

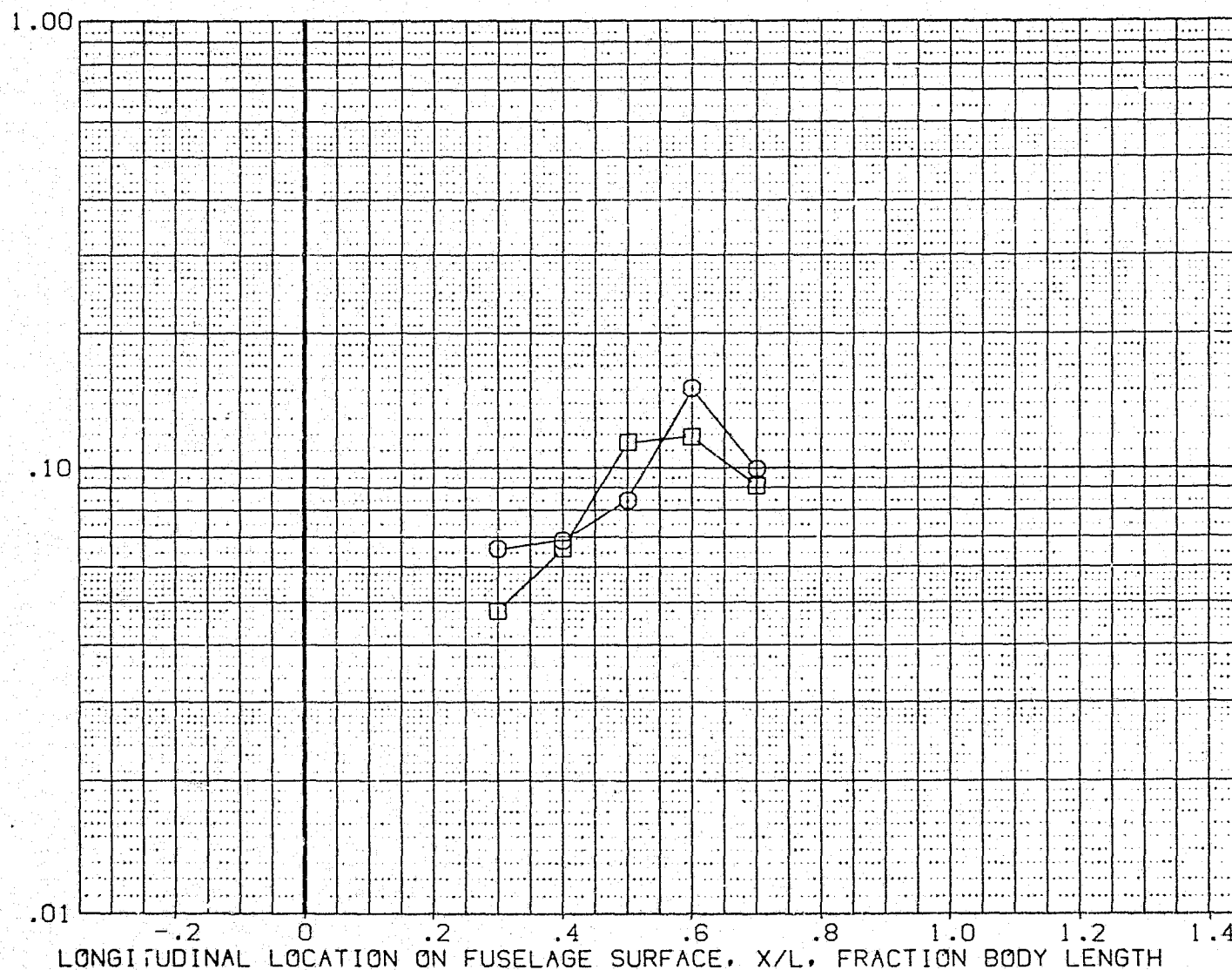


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT = .90C Z(WL) = 501.000

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RDSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RDSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

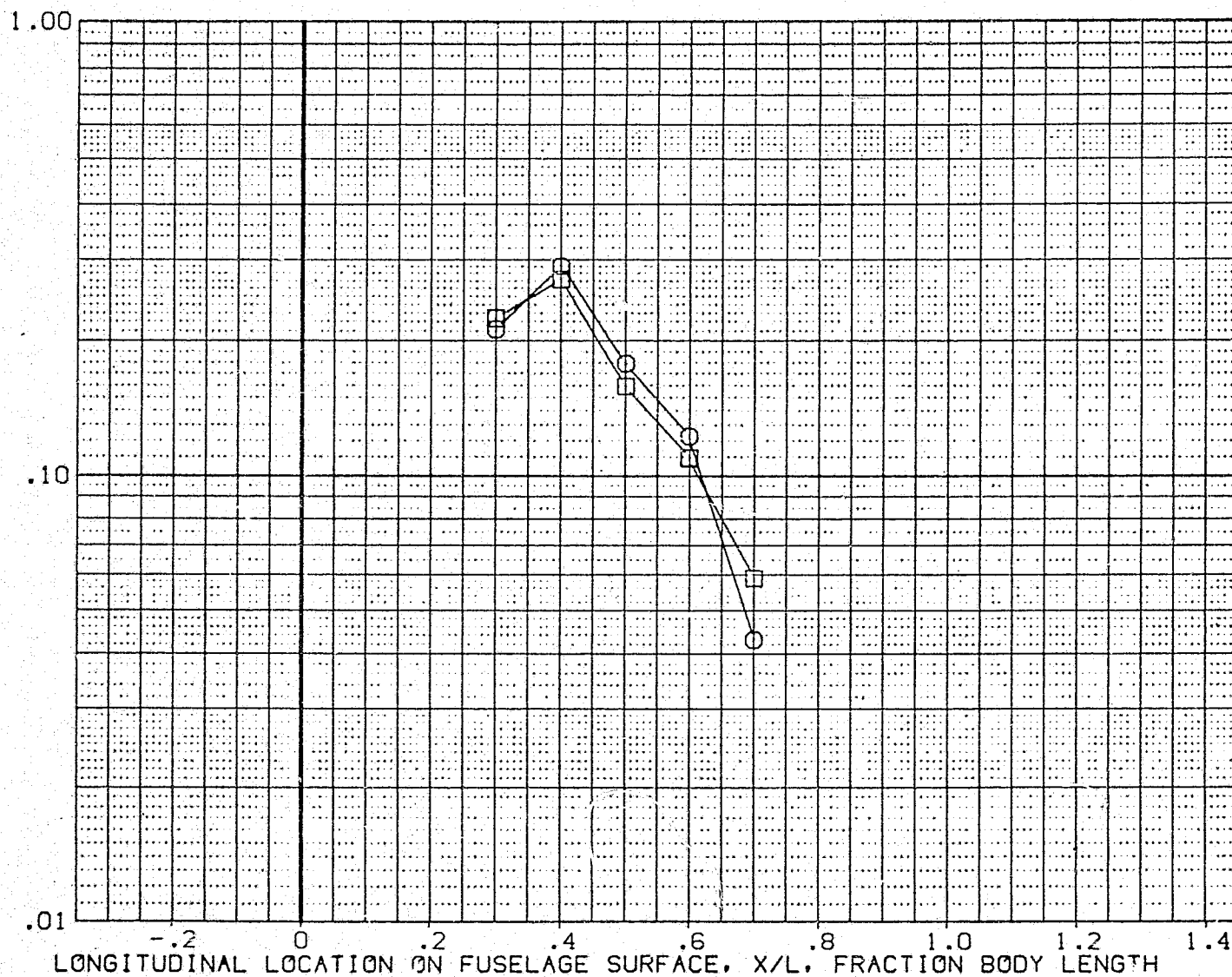


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT= 1.000 Z(WL) = 375.000

PAGE 70

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RQSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

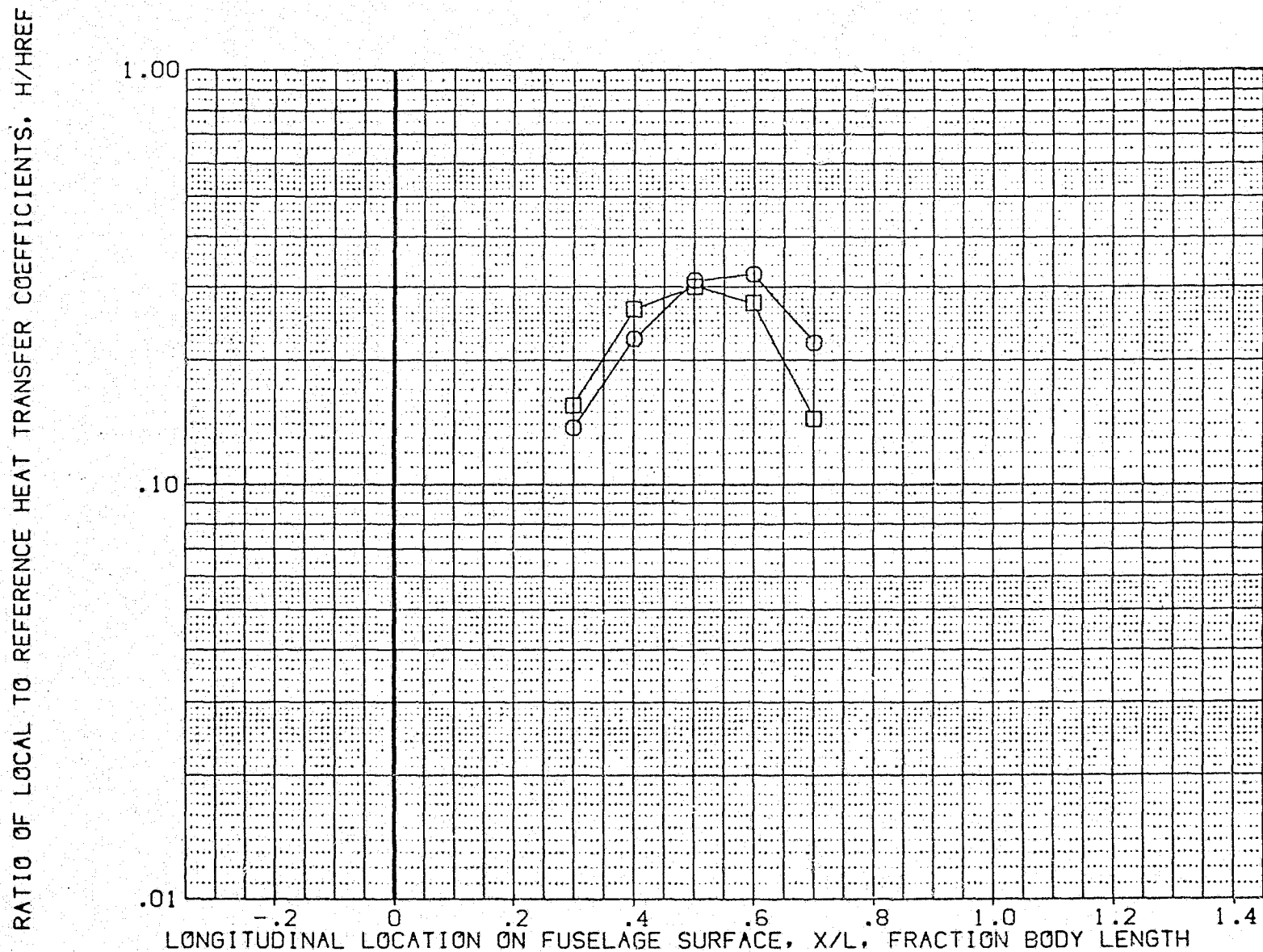


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT= 1.000 Z(WL) = 425.000

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(ROSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(ROSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

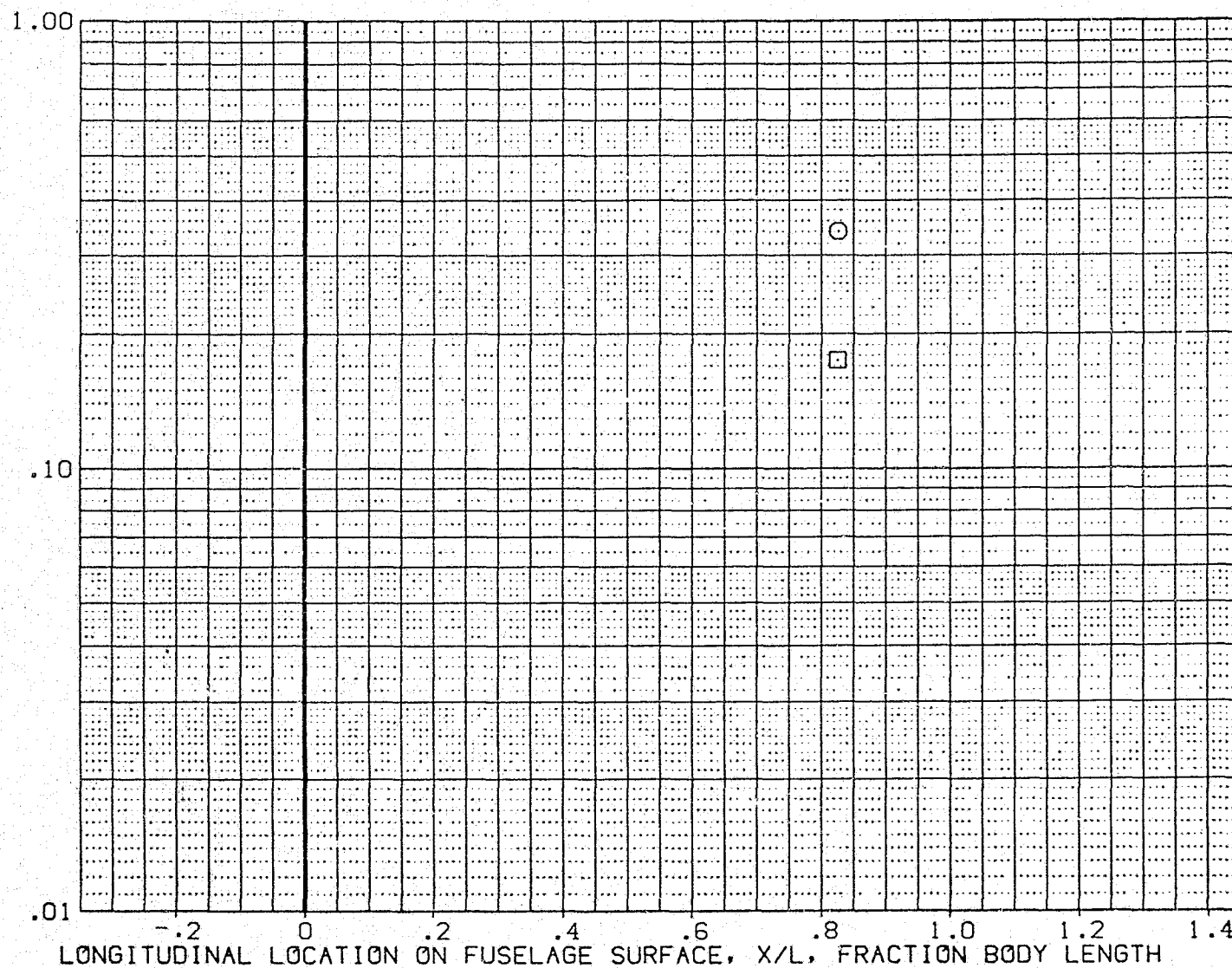


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDELIP ANGLE

RN/L = 2.987 HAW/HT= 1.000 Z(WL) = 465.000

PAGE 72

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(R0SU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

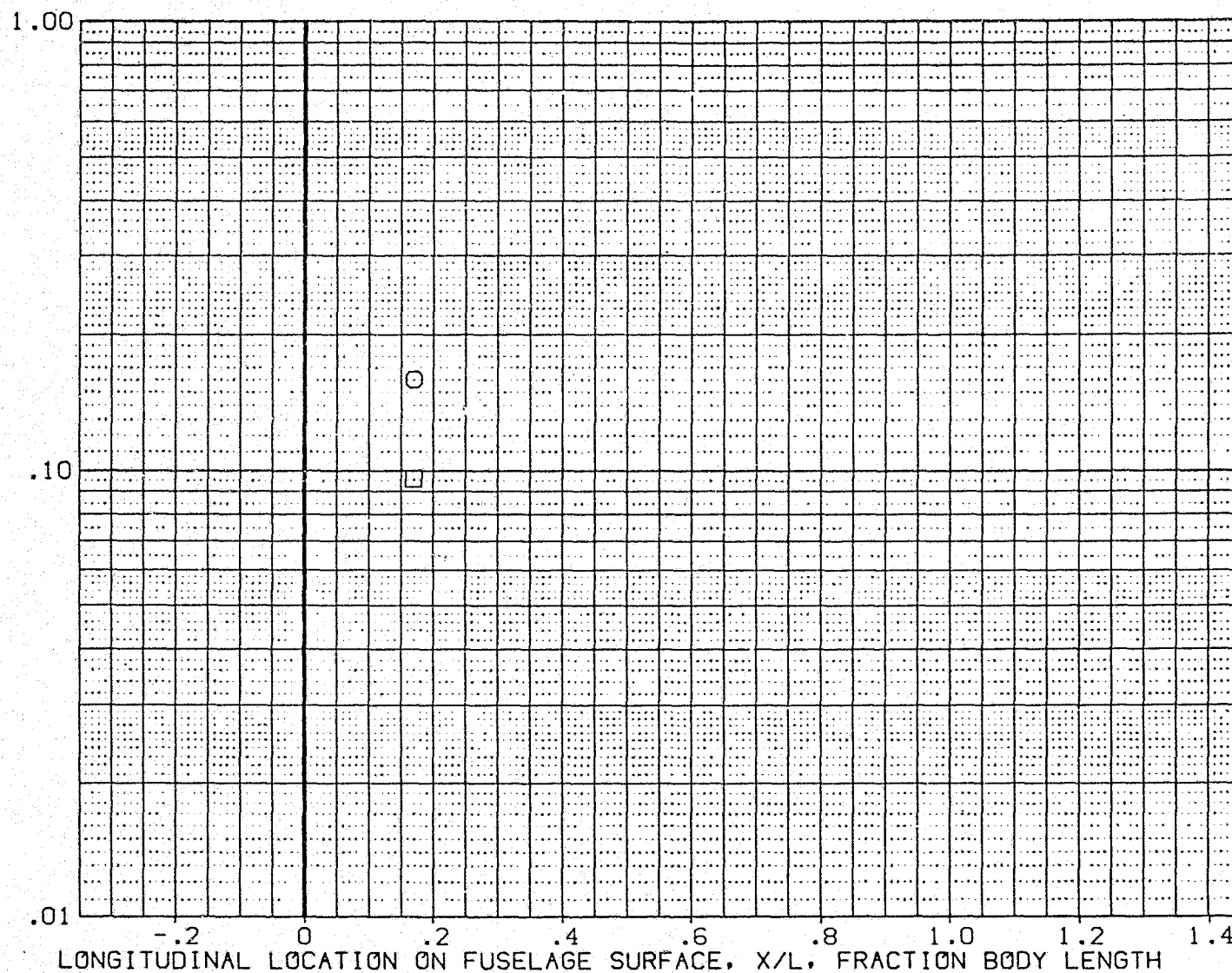


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT= 1.000 Z(WL) = 472.900

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RQSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

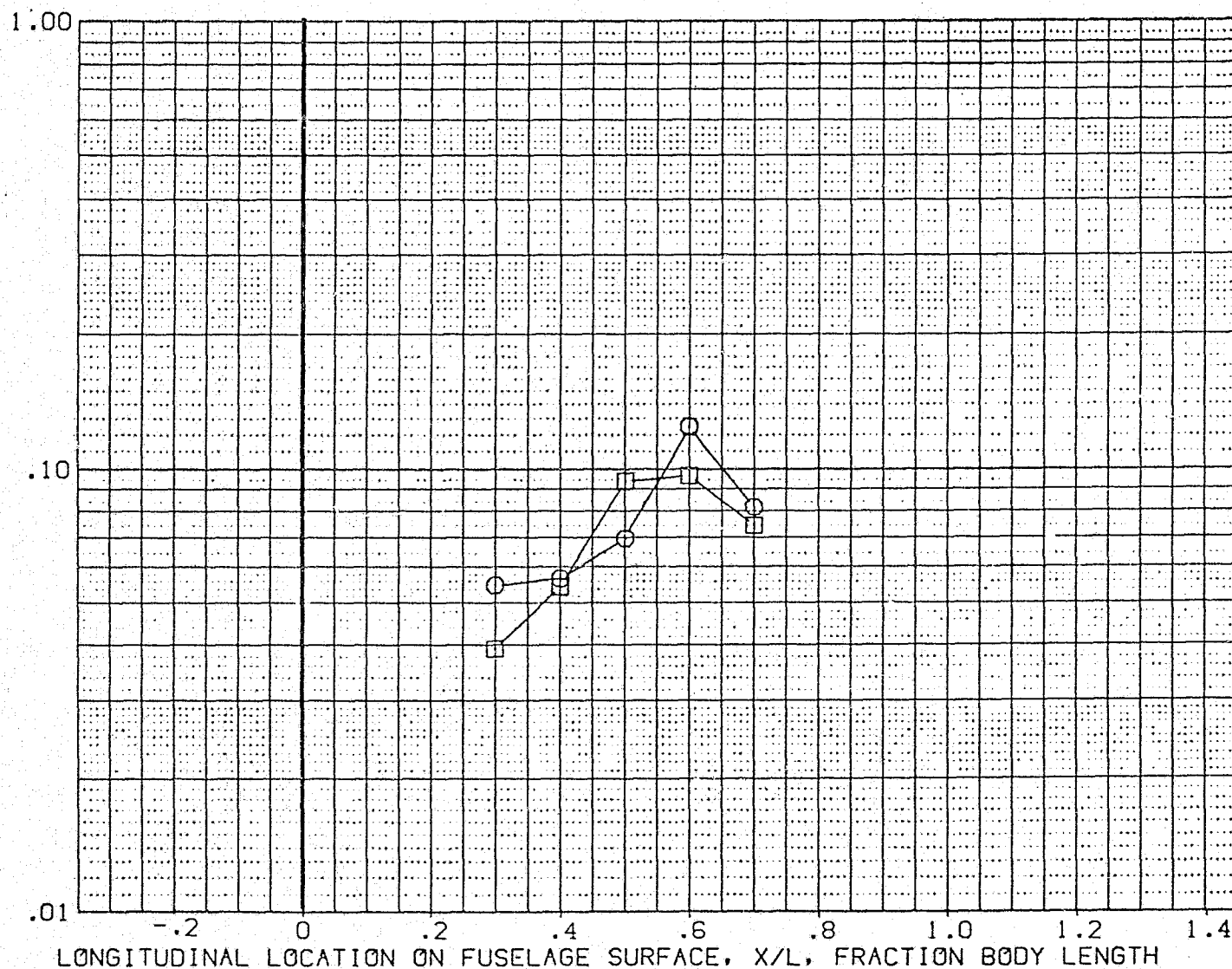


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 2.987 HAW/HT= 1.000 Z(WL) = 501.000

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RQSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

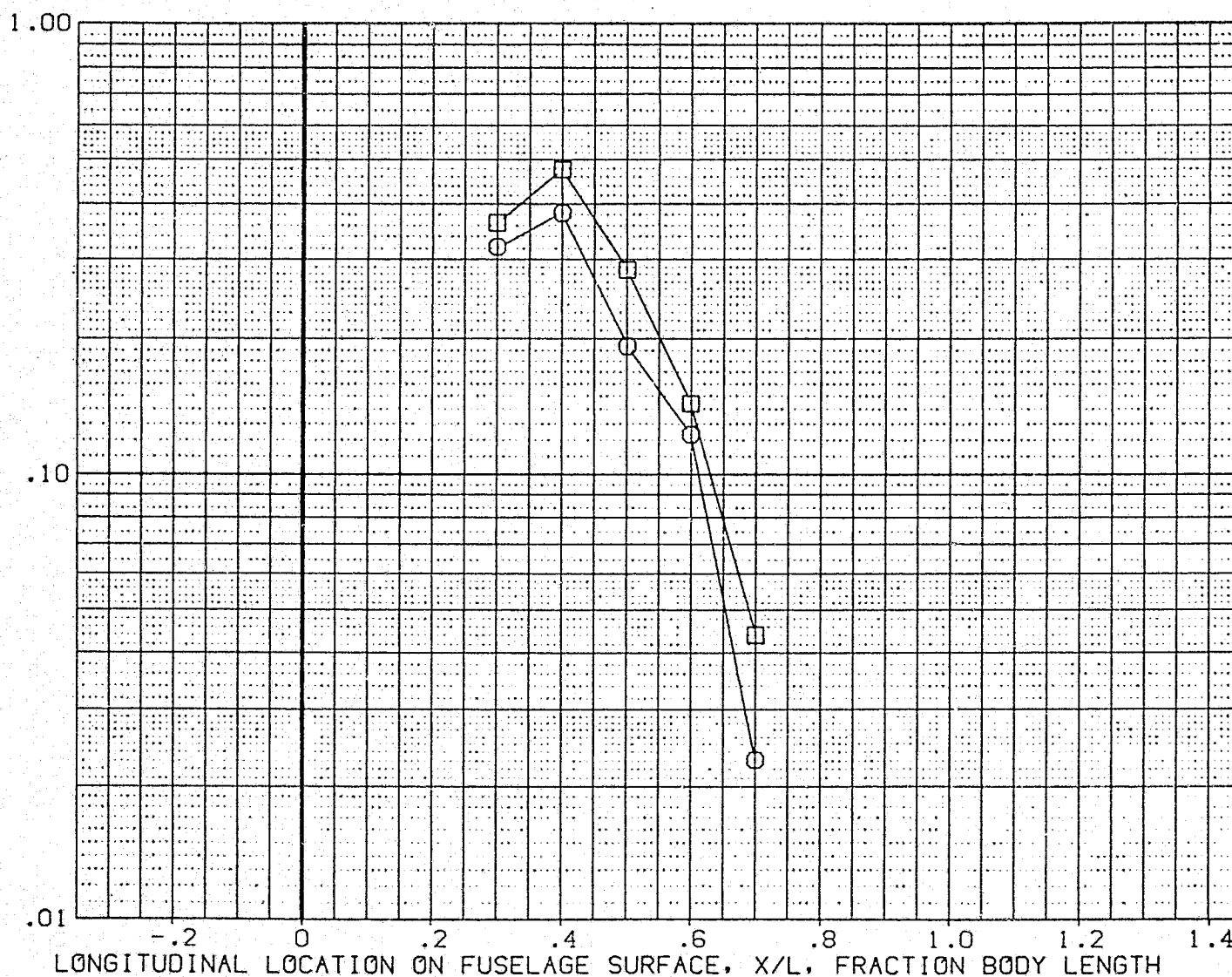


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT = .850 Z(WL) = 375.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RDSU06)	0H45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RDSU08)	0H45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

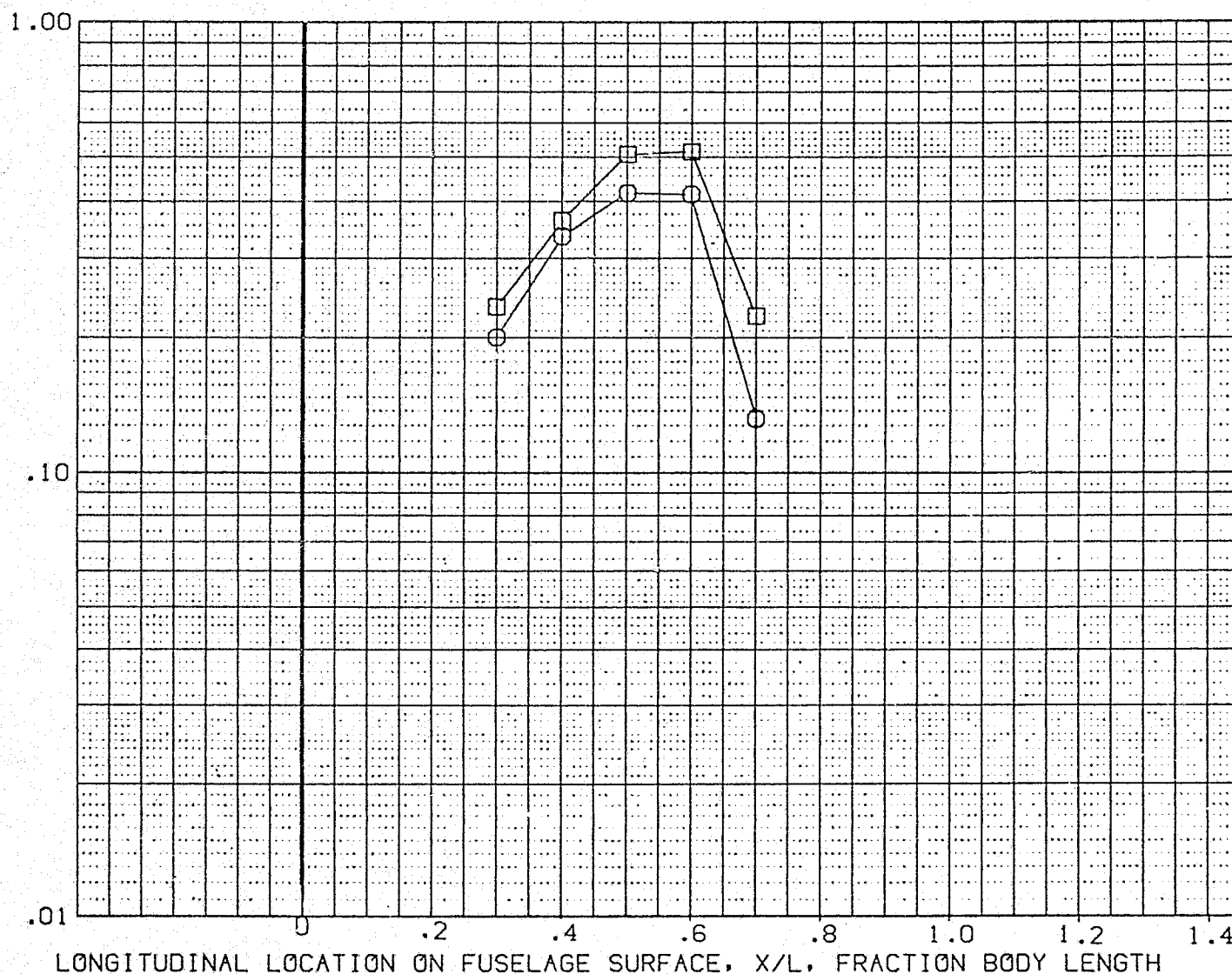


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT = .850 Z(WL) = 425.000

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU06)	BH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RQSU08)	BH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

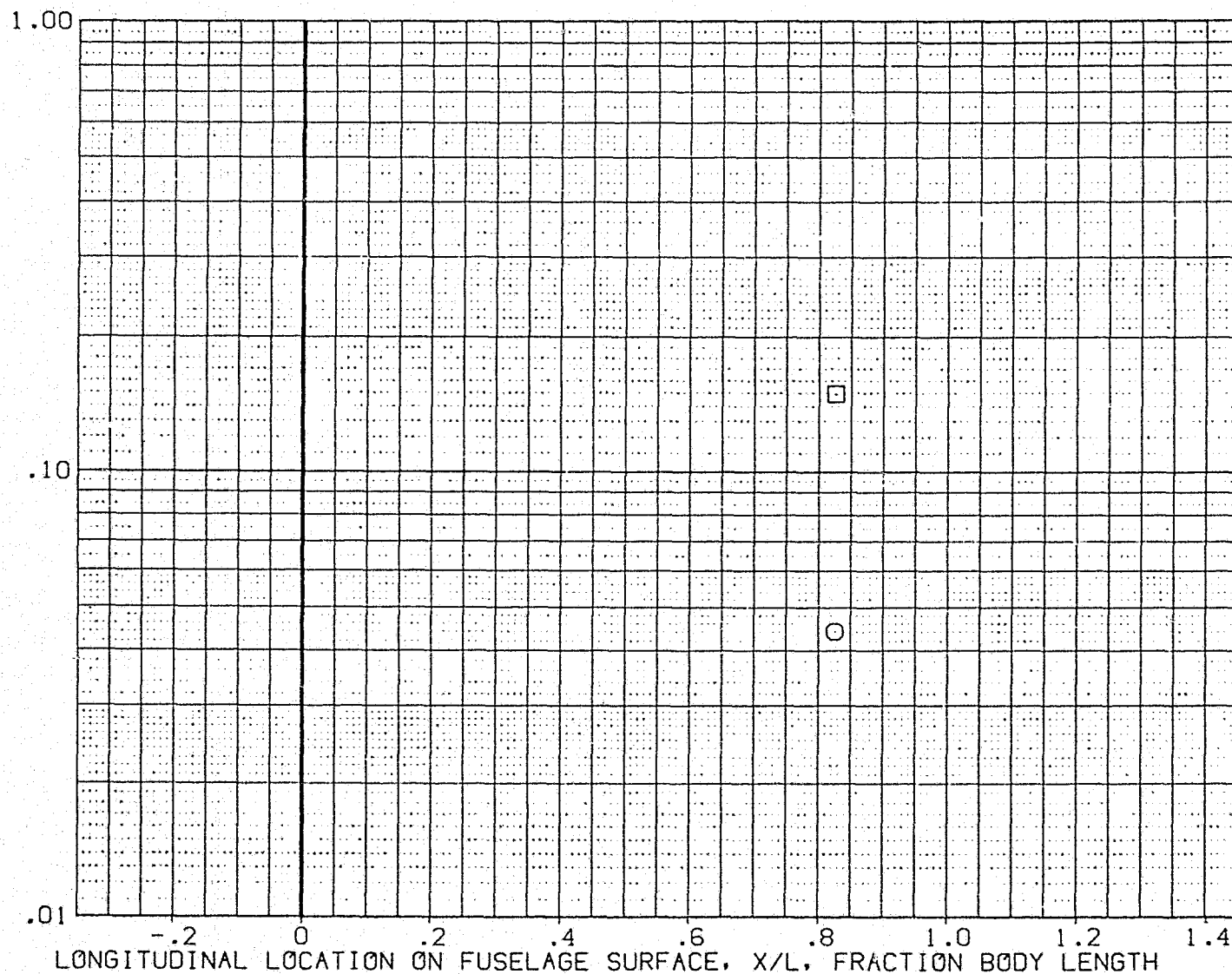


FIG 10. FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT = .850 Z(WL) = 465.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU06)	CH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RQSU08)	CH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

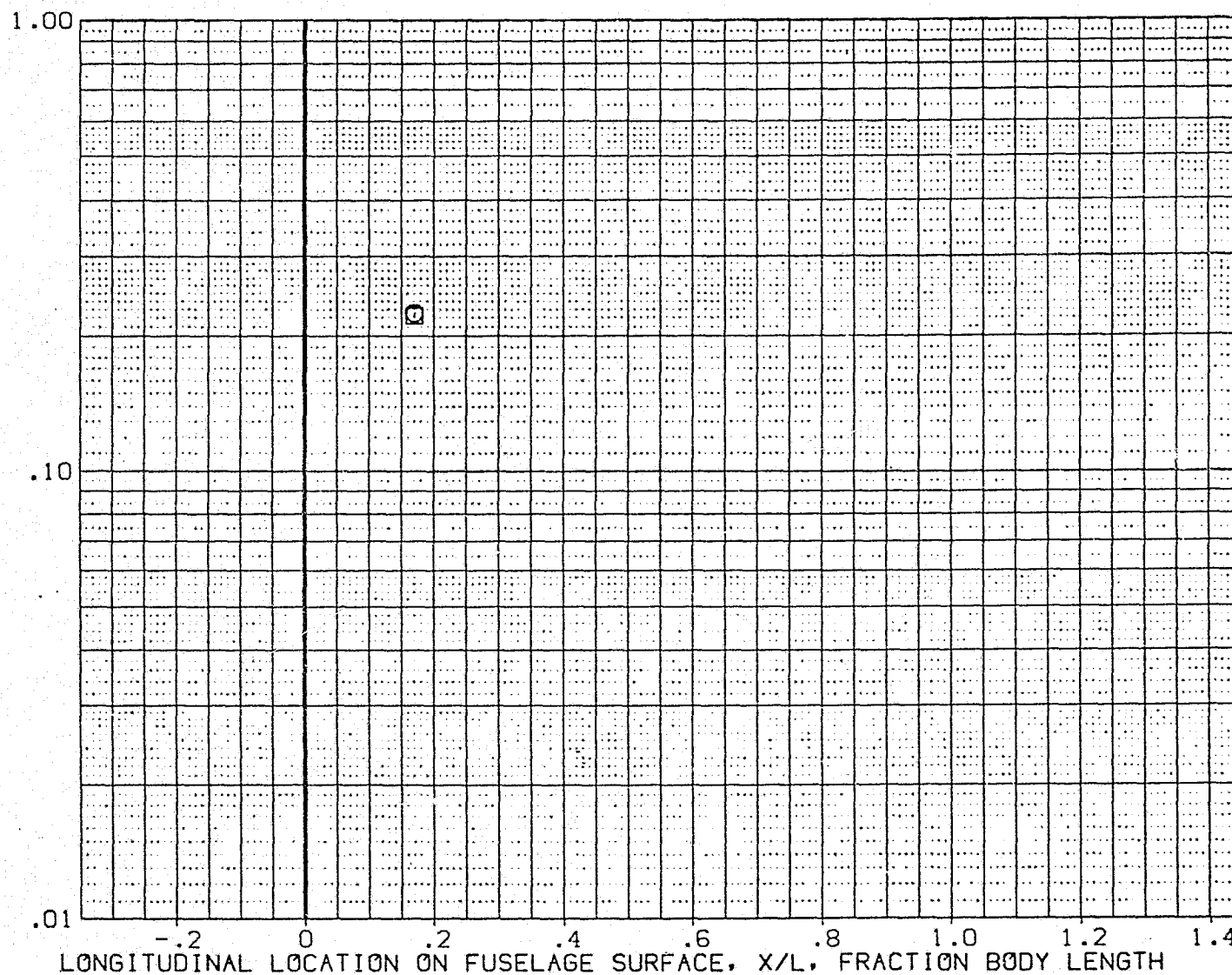


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

$RN/L = 5.313$ $HAW/HT = .850$ $Z(WL) = 472.900$

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(ROSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(ROSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

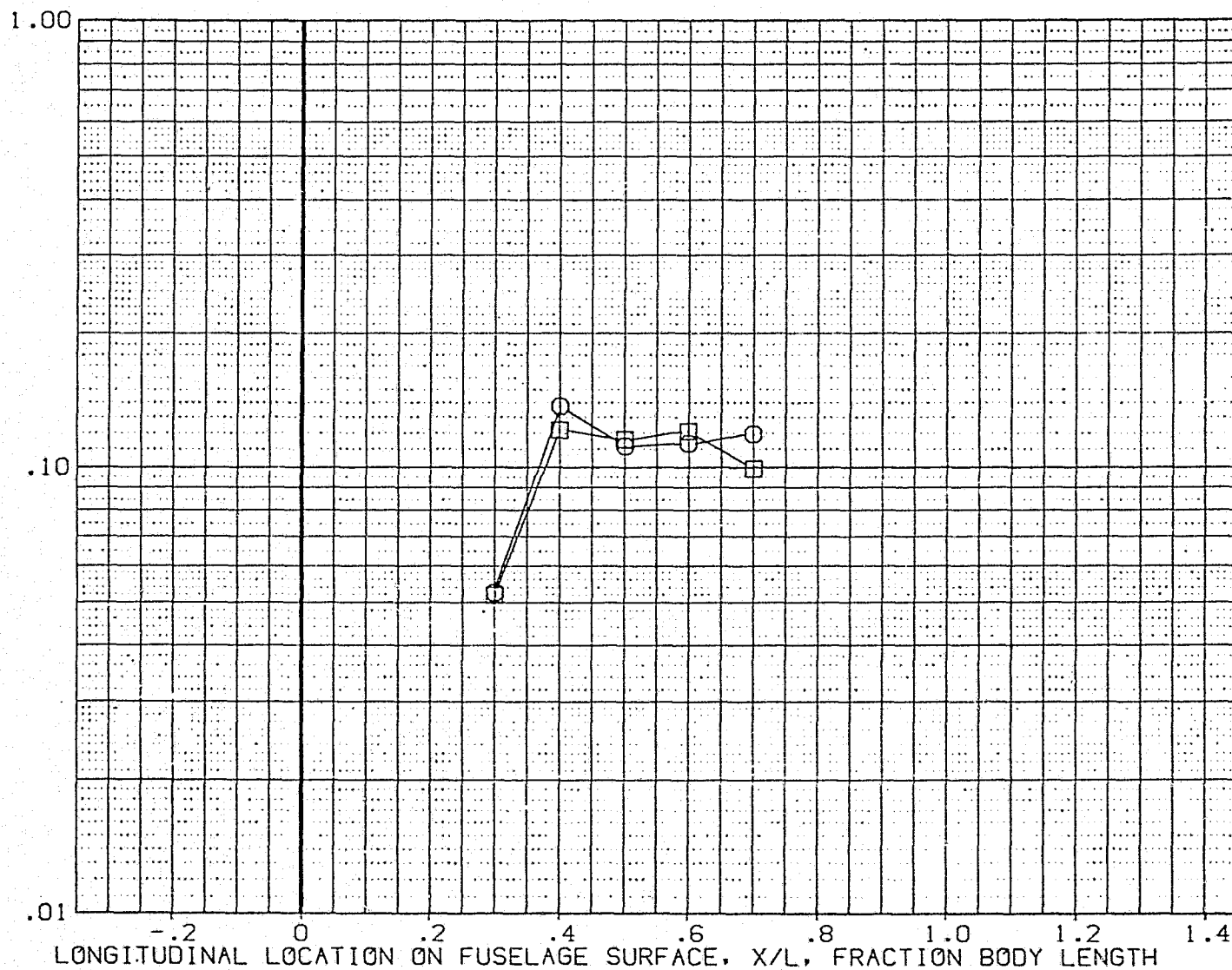


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT= .850 Z(WL) = 501.000

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RQSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

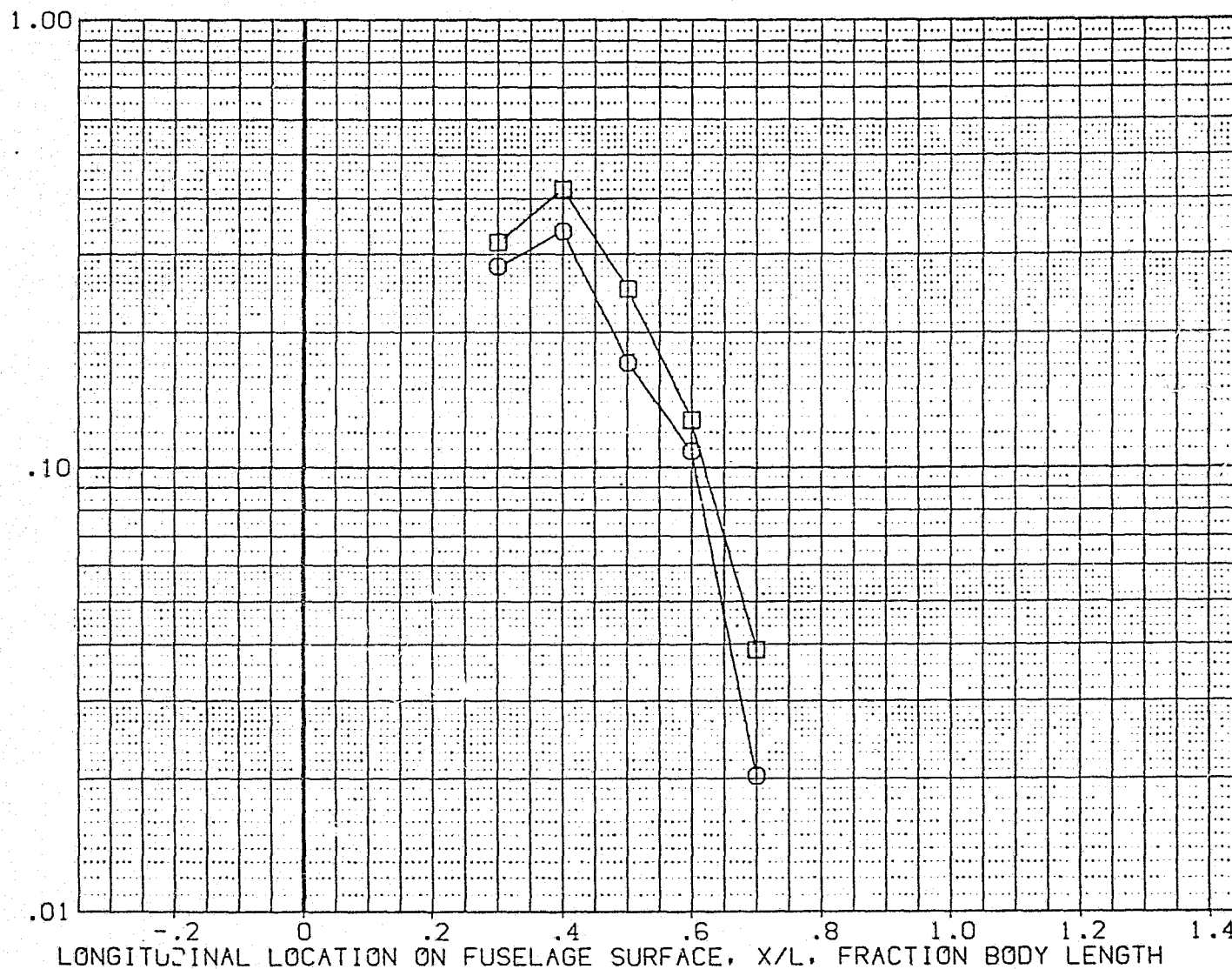


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT= .900 Z(WL) = 375.000

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(R0SU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	

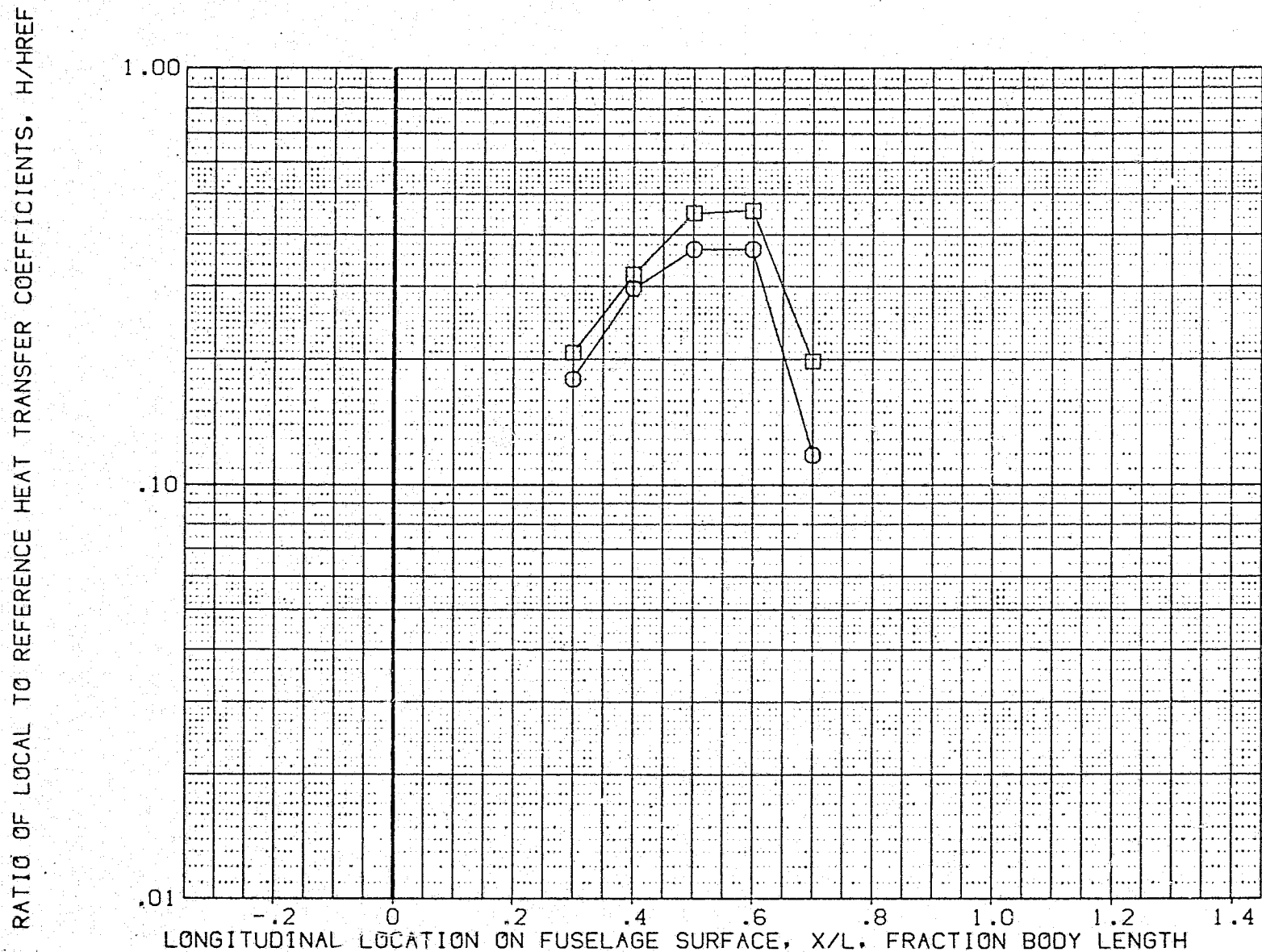


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT= .900 Z(WL) = 425.000

PAGE 81

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(ROSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(ROSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

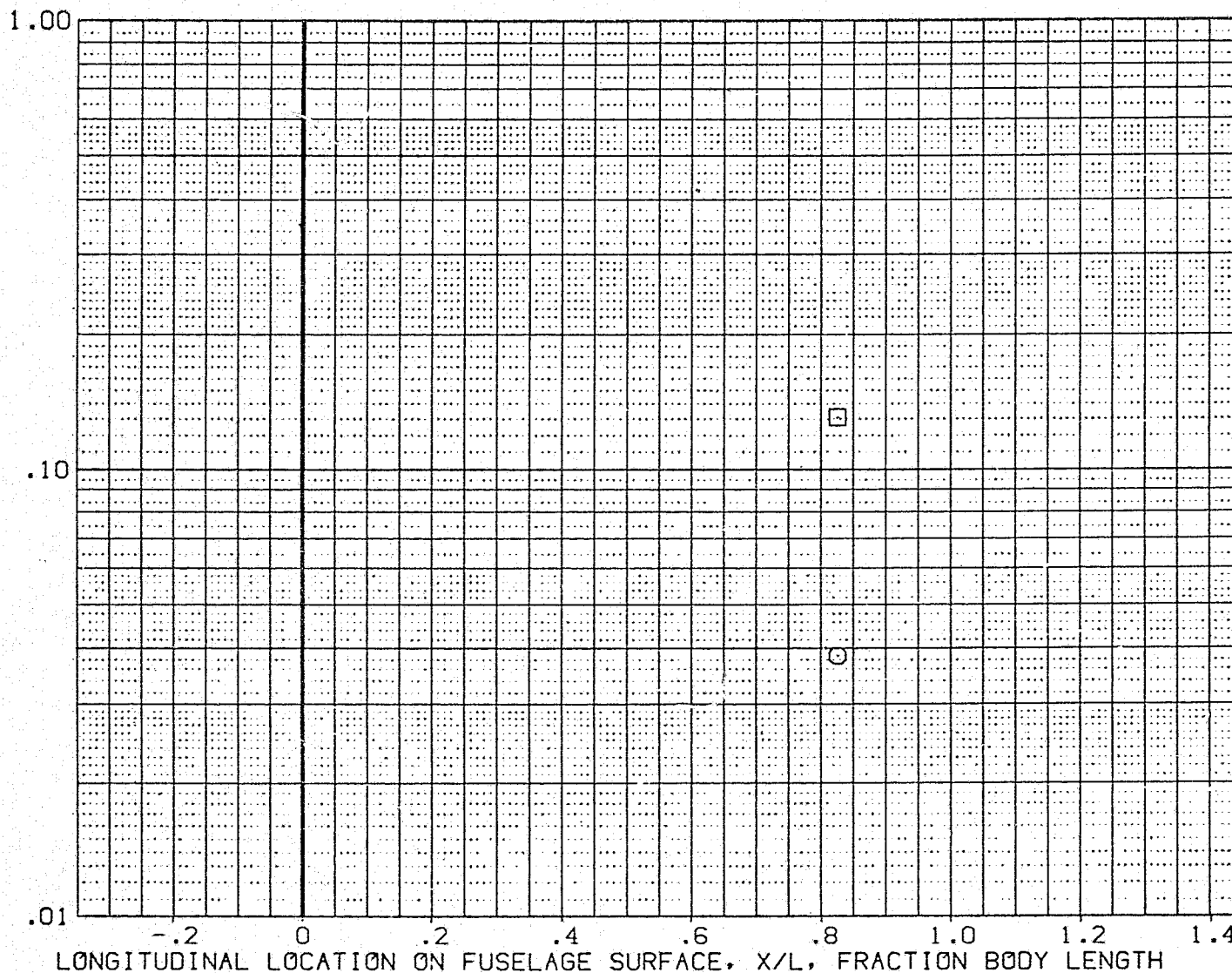


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT = .900 Z(WL) = 465.000

PAGE 82

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(R0SU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

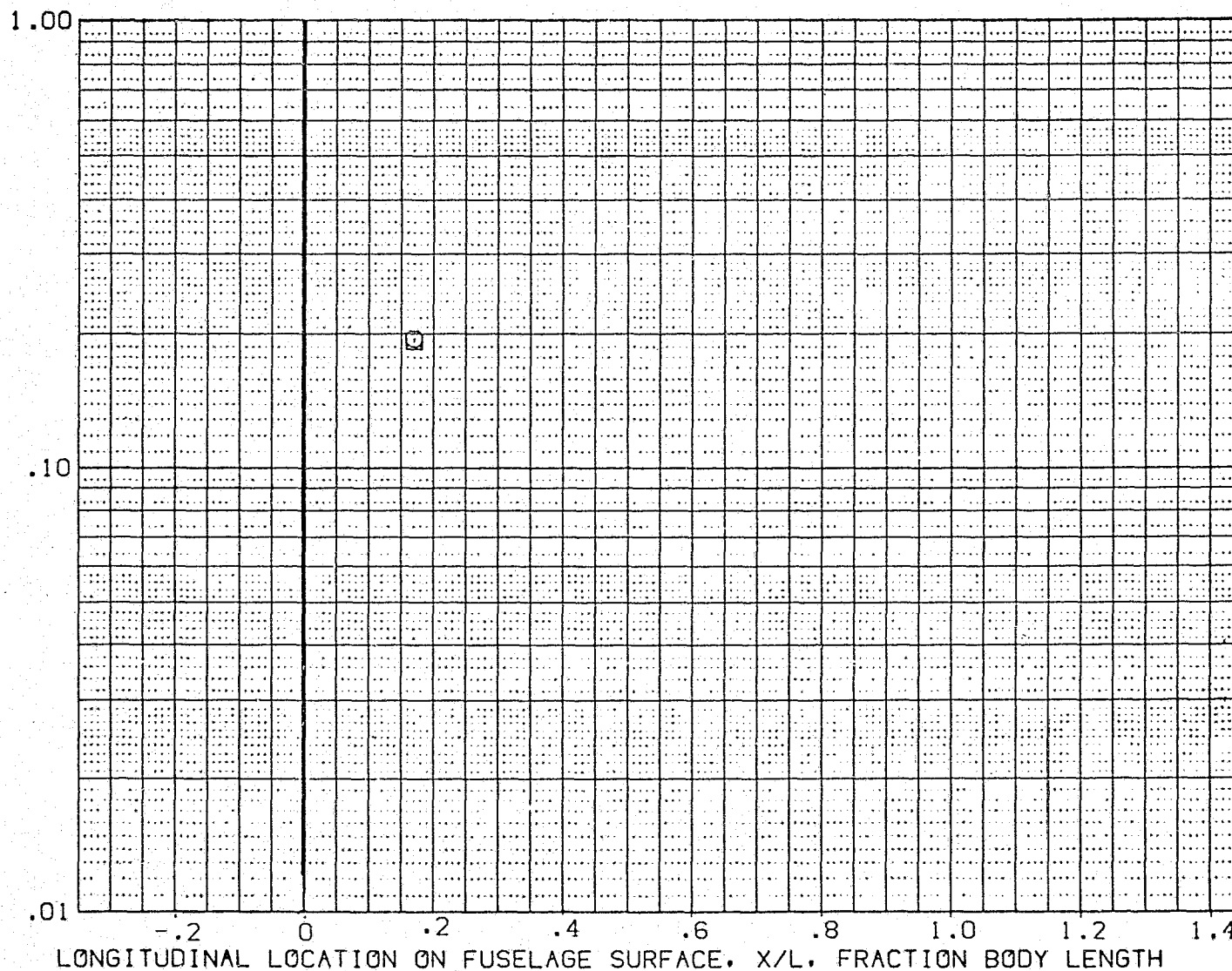


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDELIP ANGLE

RN/L = 5.313 HAW/HT = .900 Z(WL) = 472.900

PAGE 83

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(ROSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(ROSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

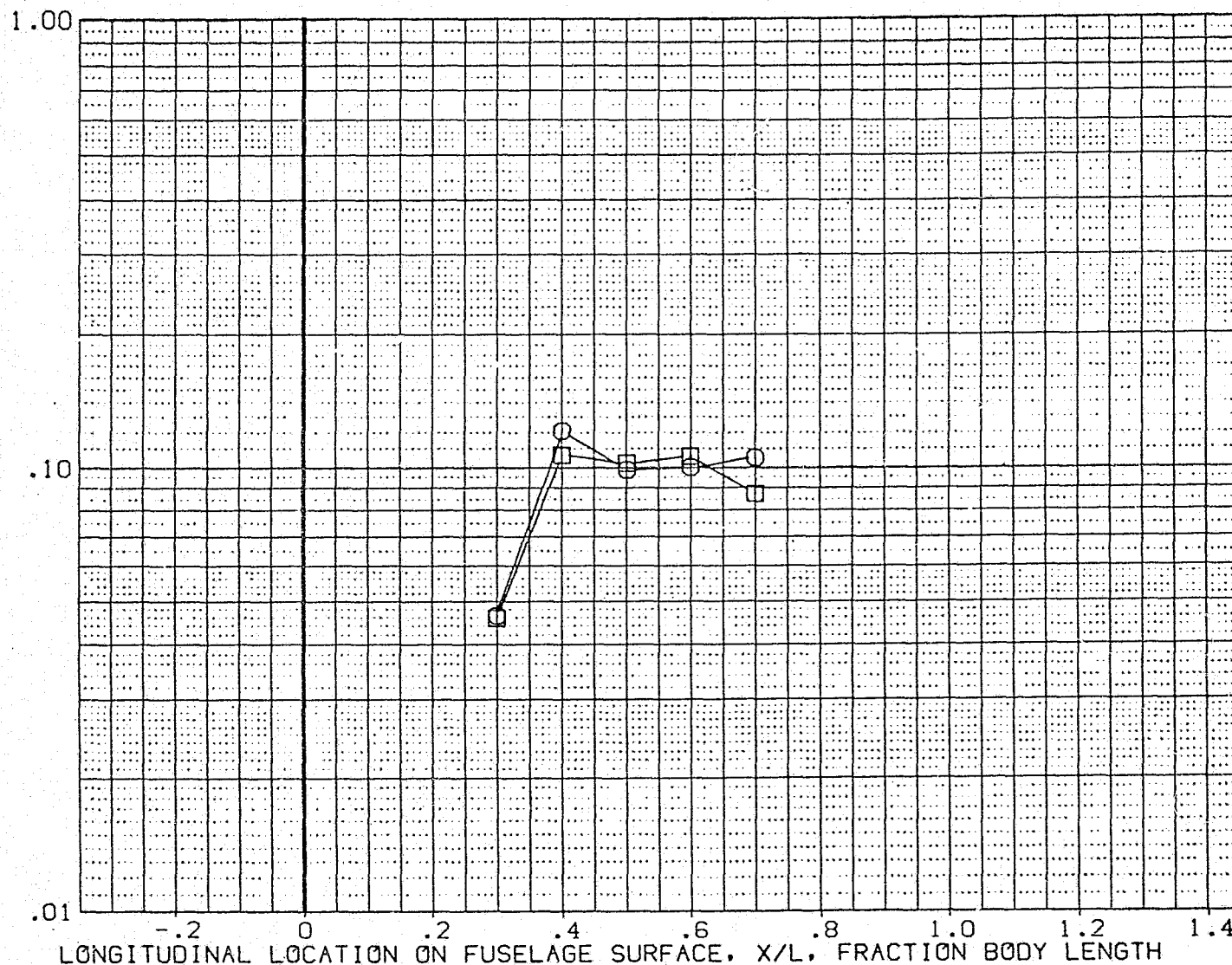


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT = .900 Z(WL) = 501.000

PAGE 84

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(ROSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(ROSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

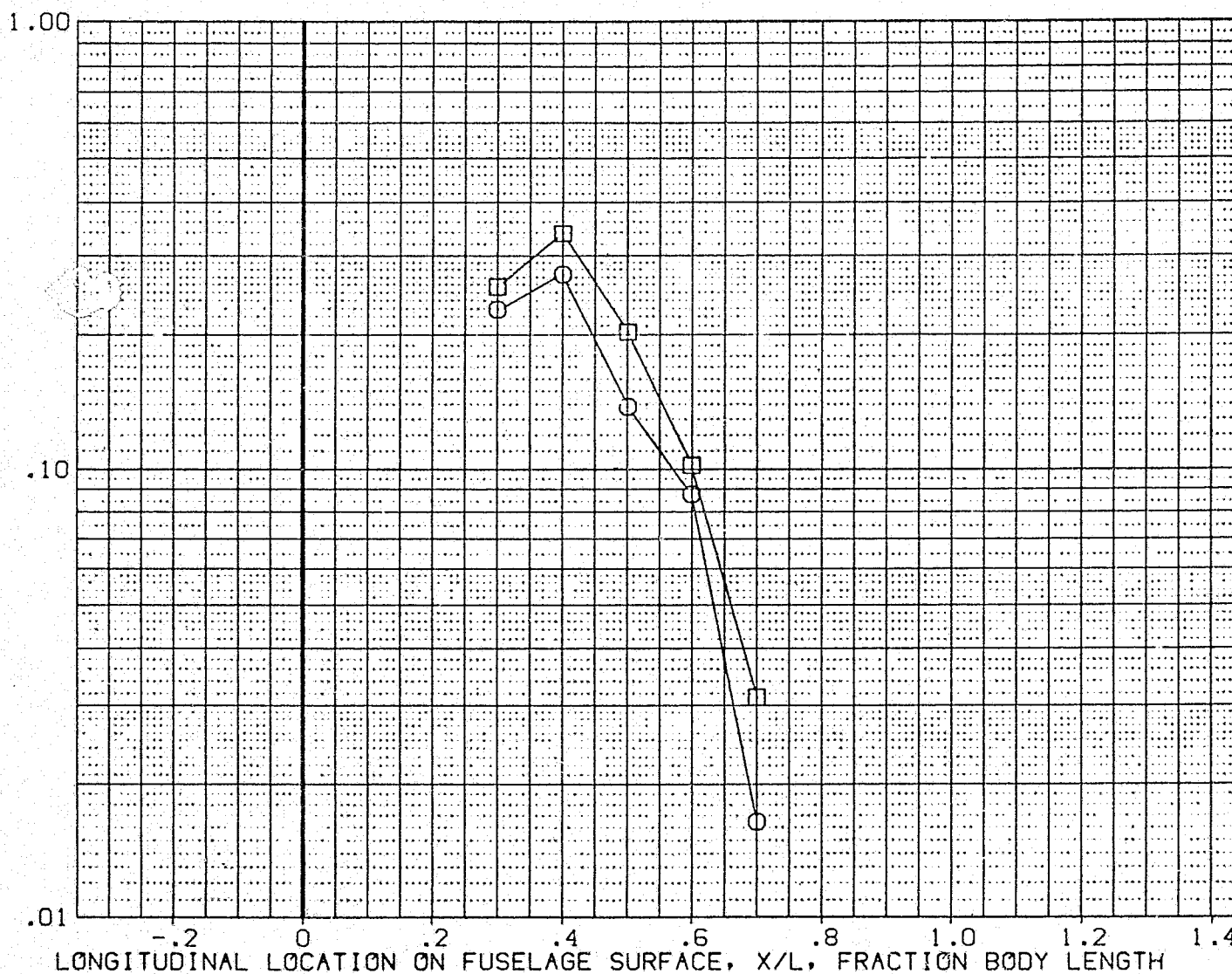


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT= 1.000 Z(WL) = 375.000

PAGE 85

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(ROSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(ROSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

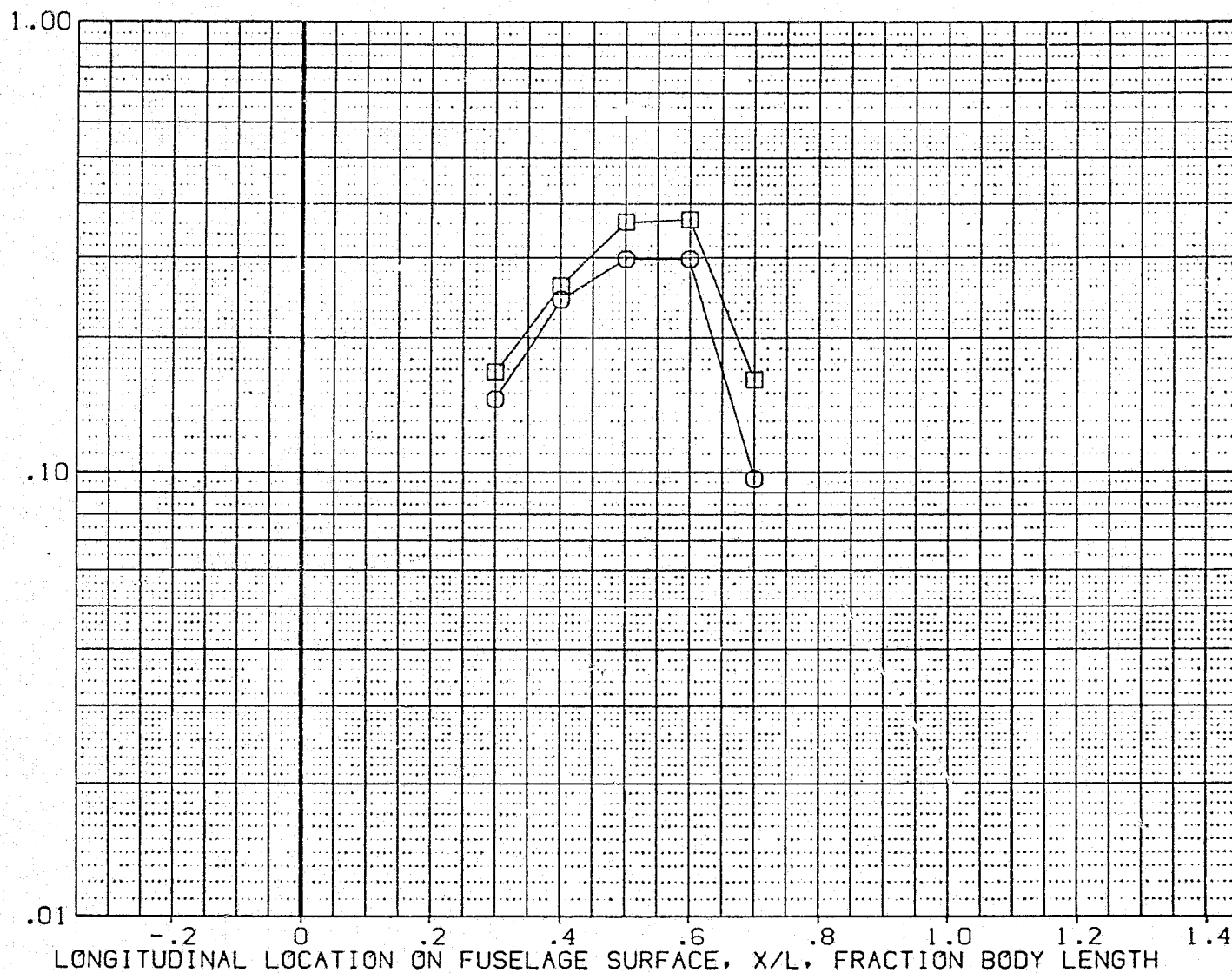


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT= 1.000 Z(WL) = 425.000

PAGE 86

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RQSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	5.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

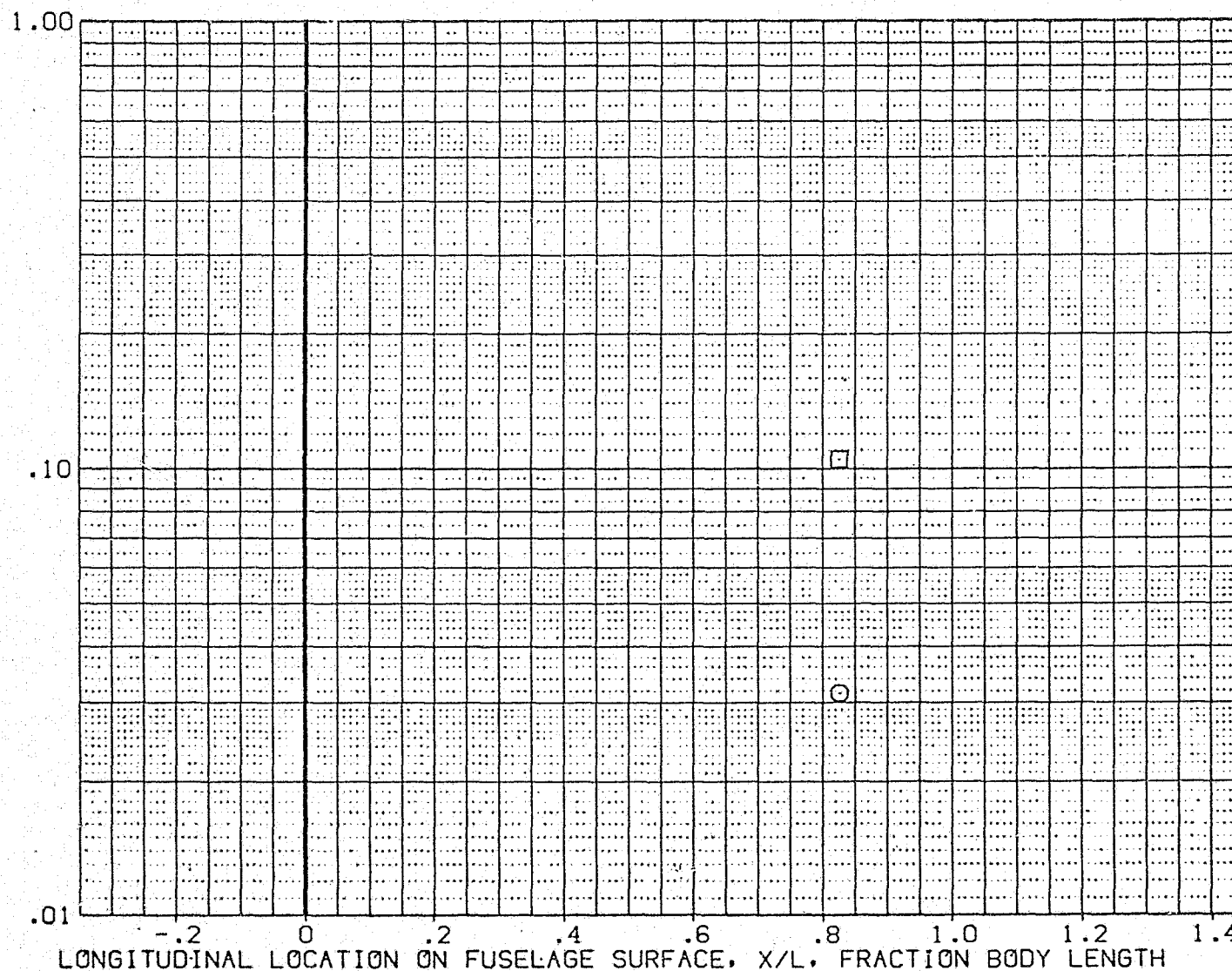


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT = 1.000 Z(WL) = 465.000

PAGE 87

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RDSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RDSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

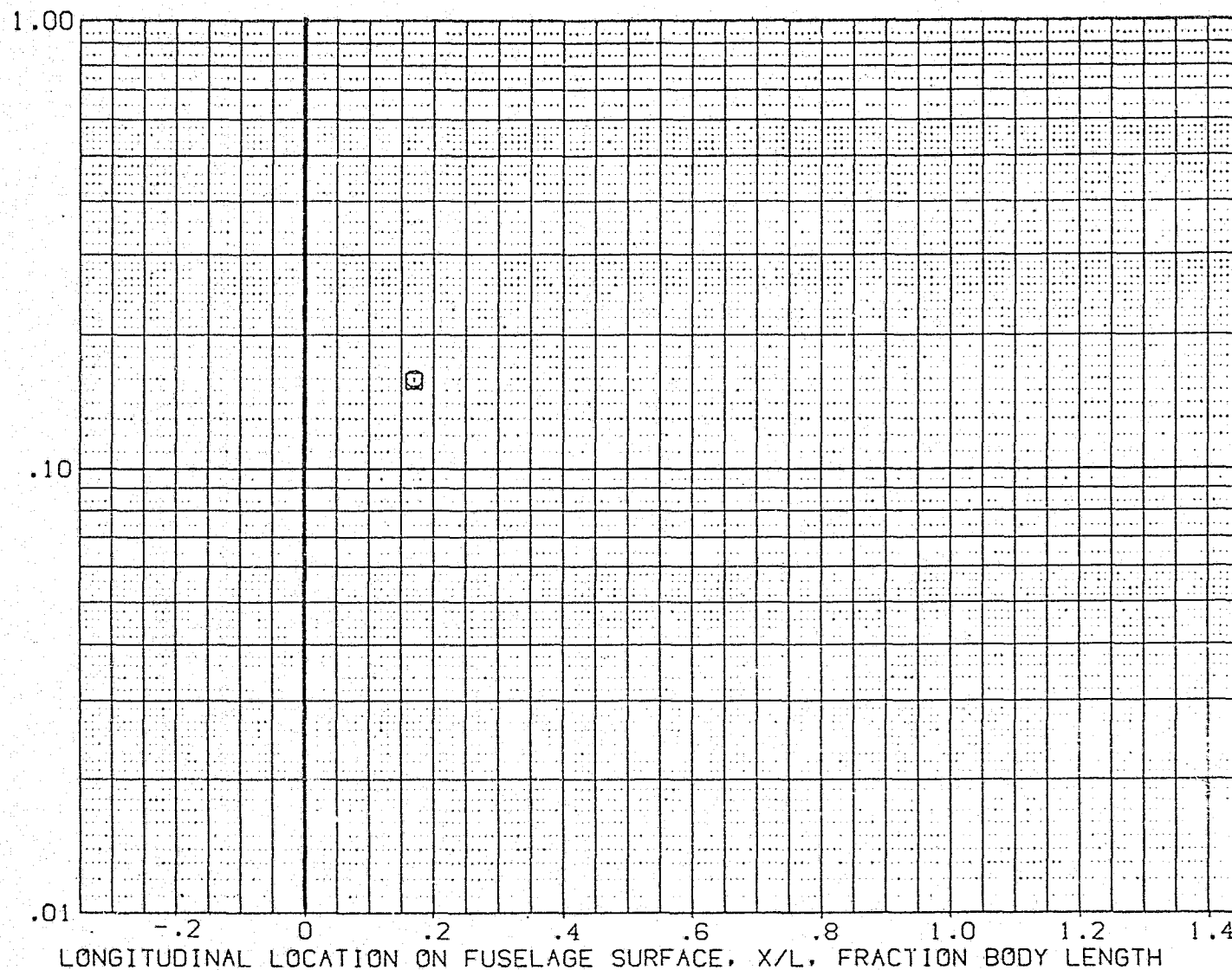


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDELIP ANGLE

RN/L = 5.313 HAW/HT= 1.000 Z(WL) = 472.900

PAGE 88

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RDSU06)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	.000	6.000
(RDSU08)	OH45 B22C7W111M4V7F5 FUSELAGE UPPER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

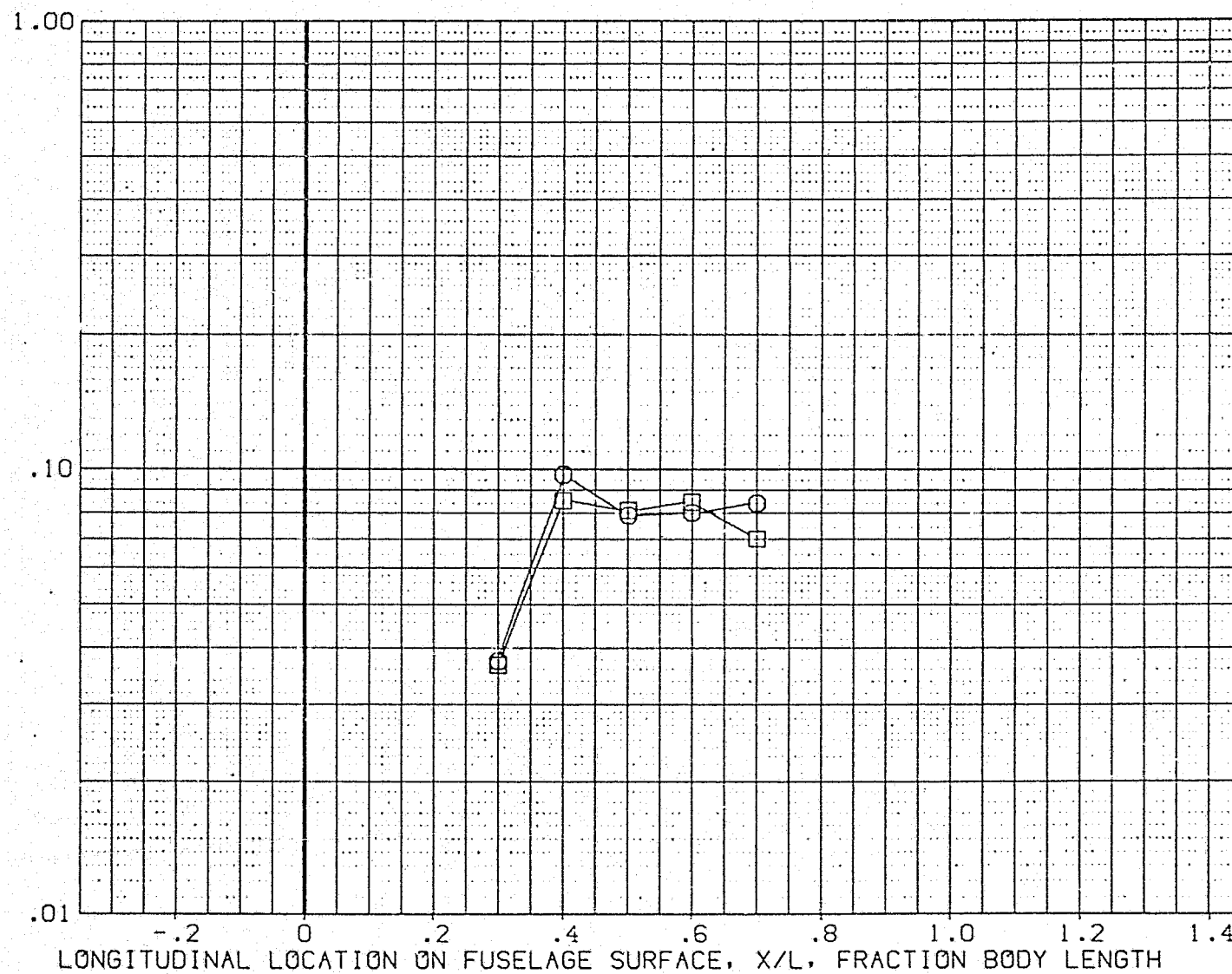


FIG 10 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/SIDESLIP ANGLE

RN/L = 5.313 HAW/HT= 1.000 Z(WL) = 501.000

PAGE 89

0H45

BZ2C/W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU06)

SYMBOL

RN/L

Z(WL)

HAW/HT

PARAMETRIC VALUES

○

2.987

375.000

.850

ALPHA

30.000

BETA

.000

□

5.313

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

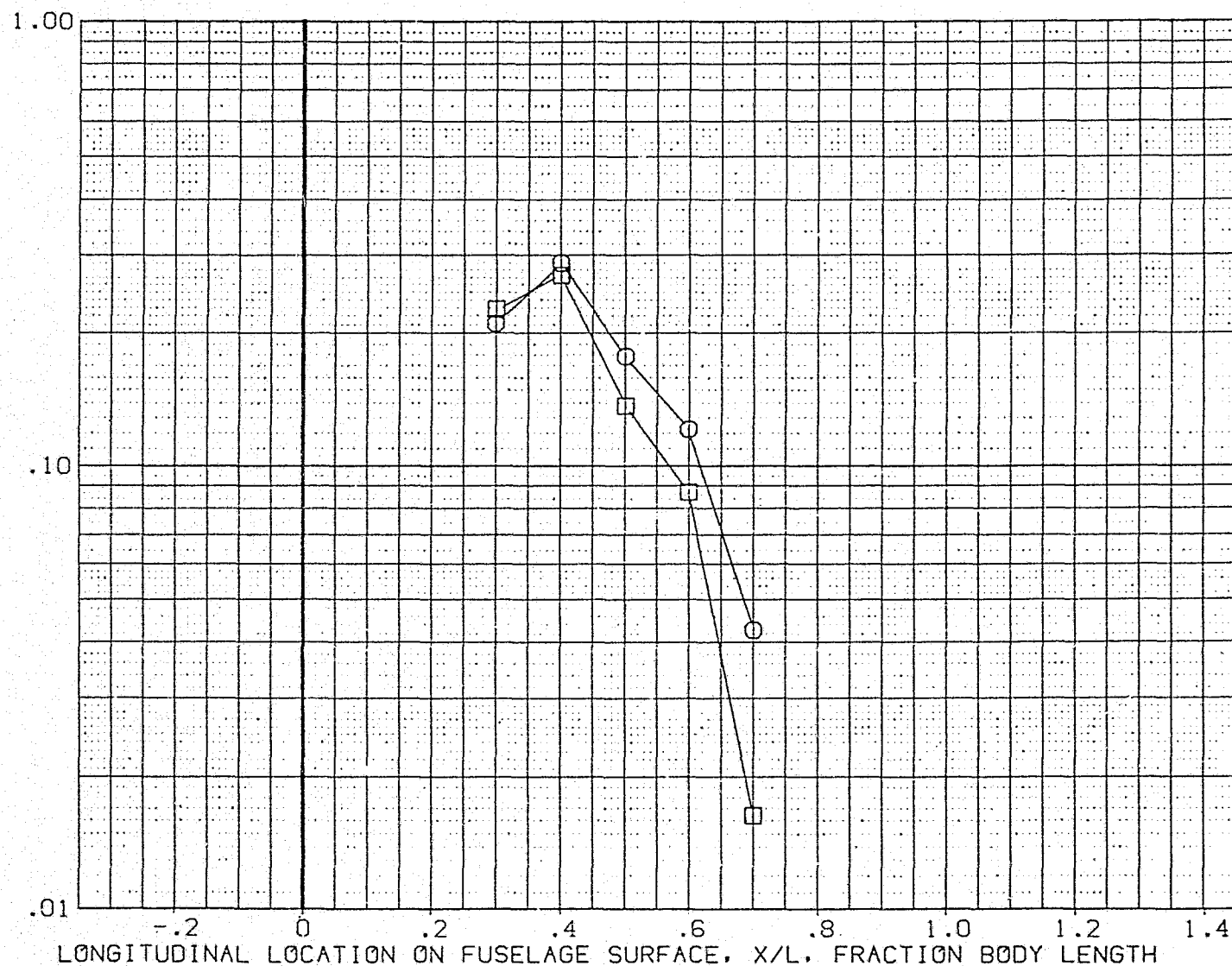


FIG 11 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU06)

SYMBOL

□ ○

RN/L

2.987

Z(WL)

425.000

HAW/HT

.850

PARAMETRIC VALUES

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

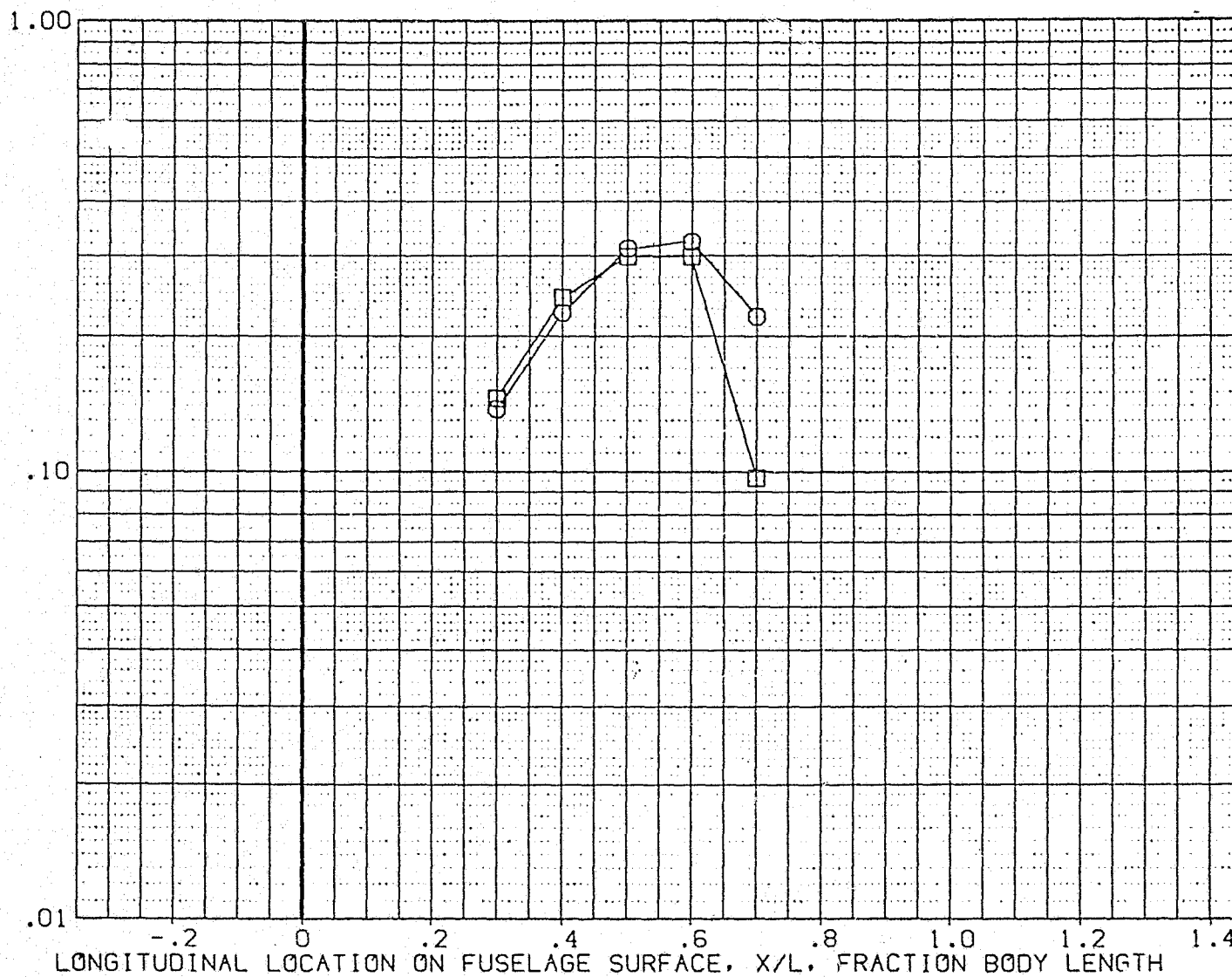


FIG 11 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/REYNOLDS NUMBER

0H45

B22C7W11M4V7F5 FUSELAGE UPPER SURFACE (RQSU06)

SYMBOL



RN/L

2.987
5.313

Z(WL)

465.000

HAW/HT

.850

PARAMETRIC VALUES

ALPHA	30.000	BETA	.000
MACH	6.000	ALPHAS	30.000
PHI	.000	PHIS	.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

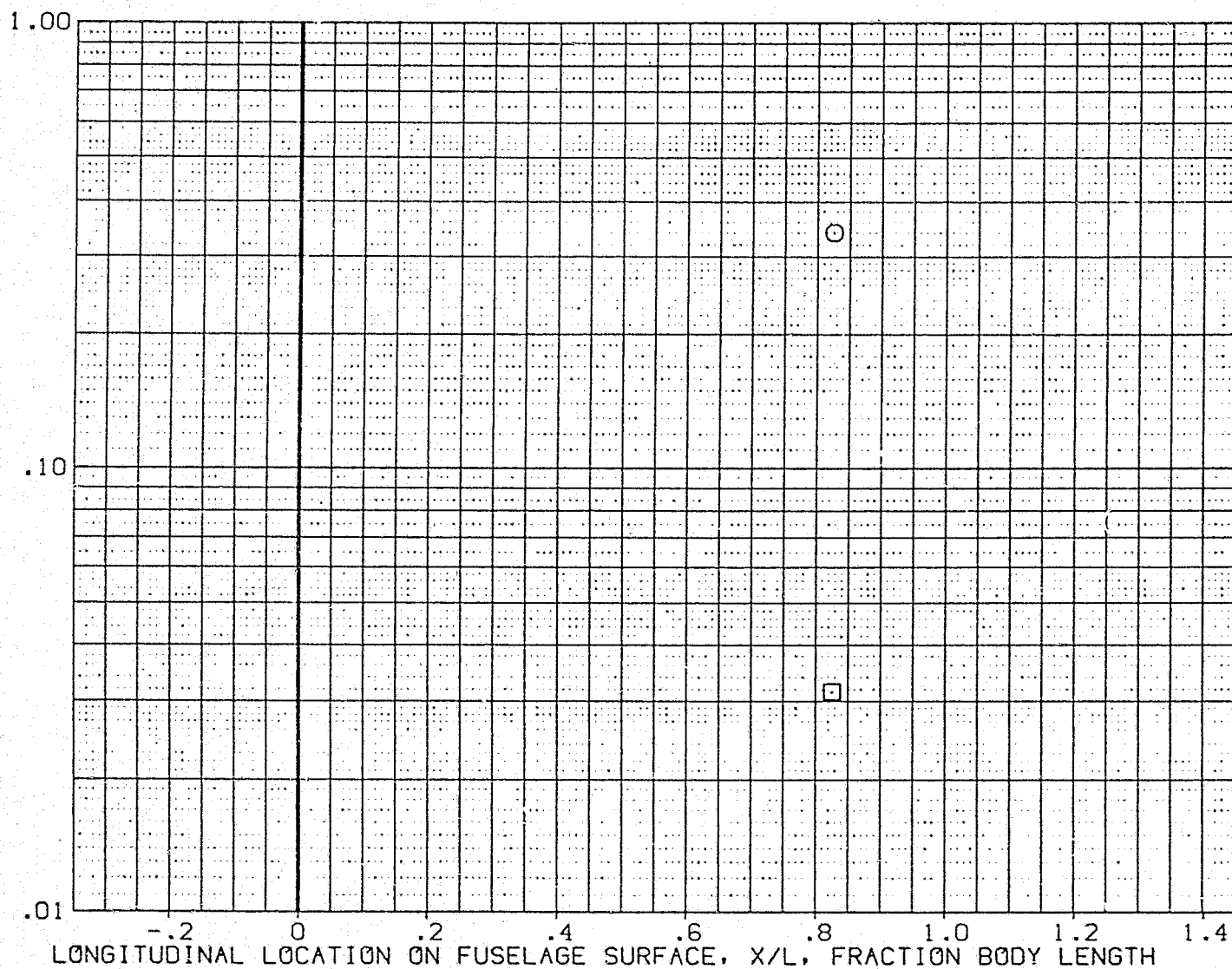


FIG 11 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU06)

SYMBOL

□

RN/L

2.987

5.313

Z(WL)

472.900

HAW/HT

.850

PARAMETRIC VALUES

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

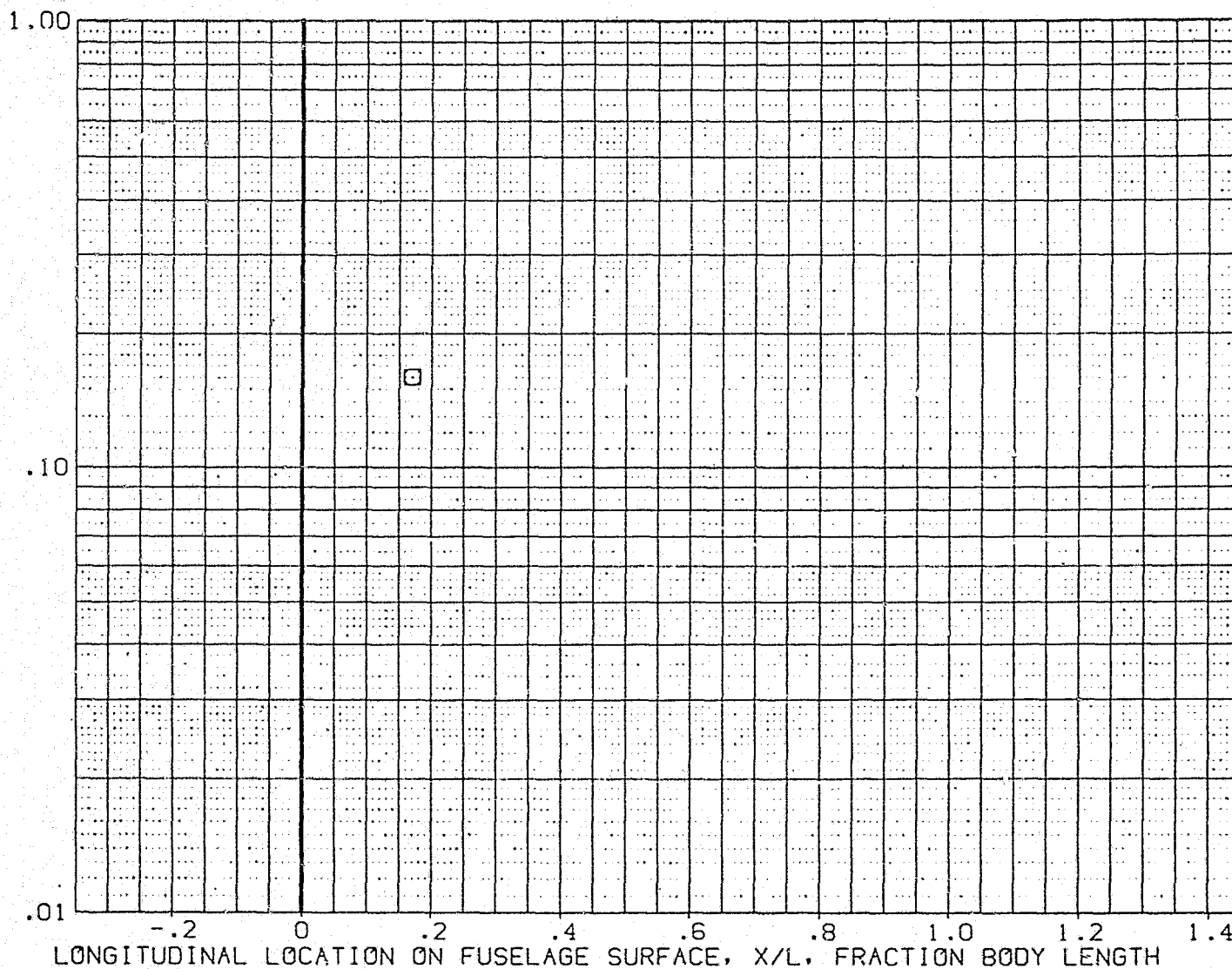
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 11 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU06)

SYMBOL



RN/L

2.987

5.313

Z(WL)

501.000

HAW/HT

.850

PARAMETRIC VALUES

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

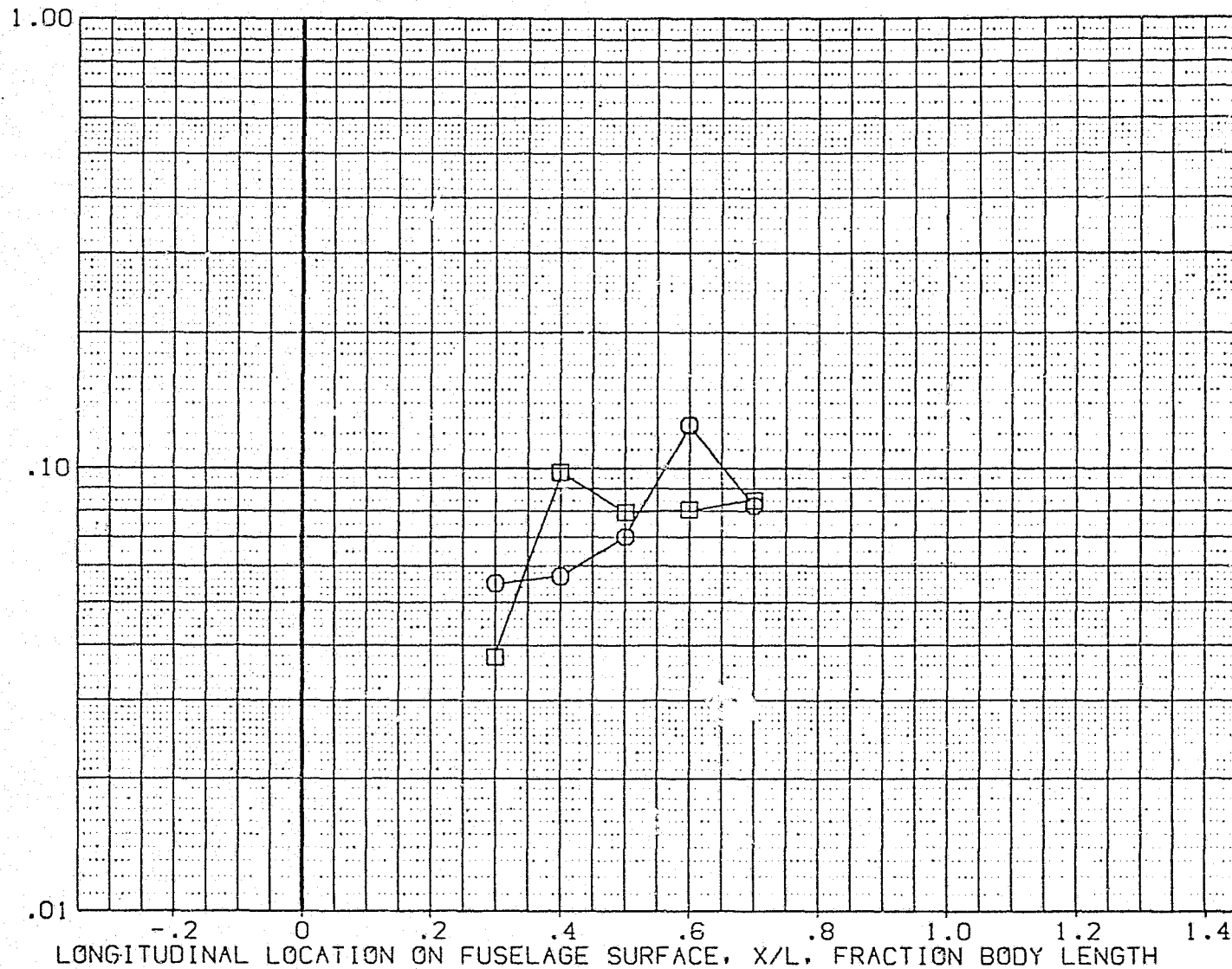
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 11 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU08)

SYMBOL	RN/L	Z(WL)	HAW/HT
○	3.121	375.000	.850
□	5.244		

PARAMETRIC VALUES			
ALPHA	20.000	BETA	1.000
MACH	6.000	ALPHAS	30.000
PHI	-2.000	PHIS	.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

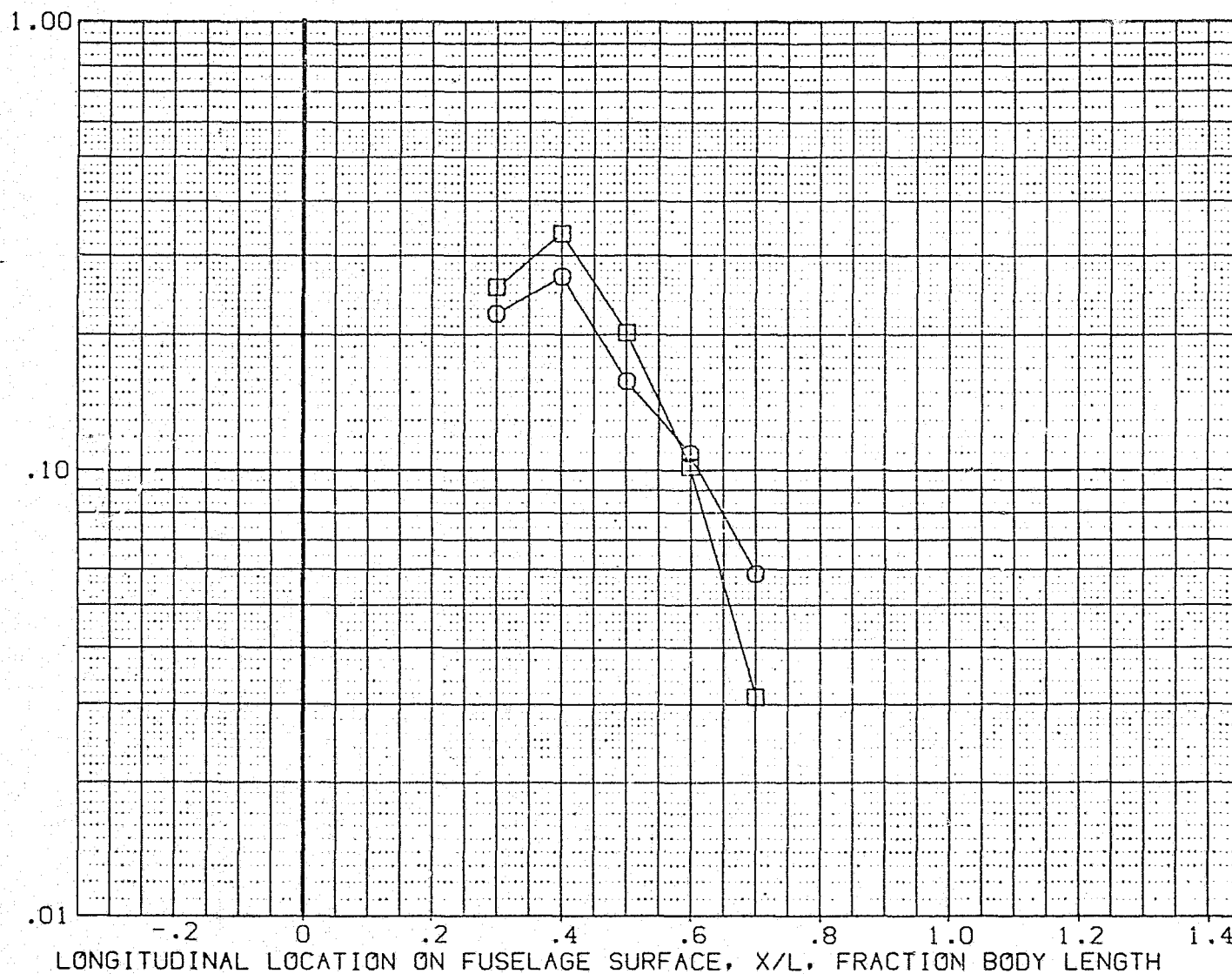


FIG 11 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU08)

SYMBOL

○
□

RN/L

3.121
5.244

Z(WL)

425.000

HAW/HT

.950

PARAMETRIC VALUES

ALPHA	30.000	BETA	1.000
MACH	6.000	ALPHAS	30.000
PHI	-2.000	PHIS	.000

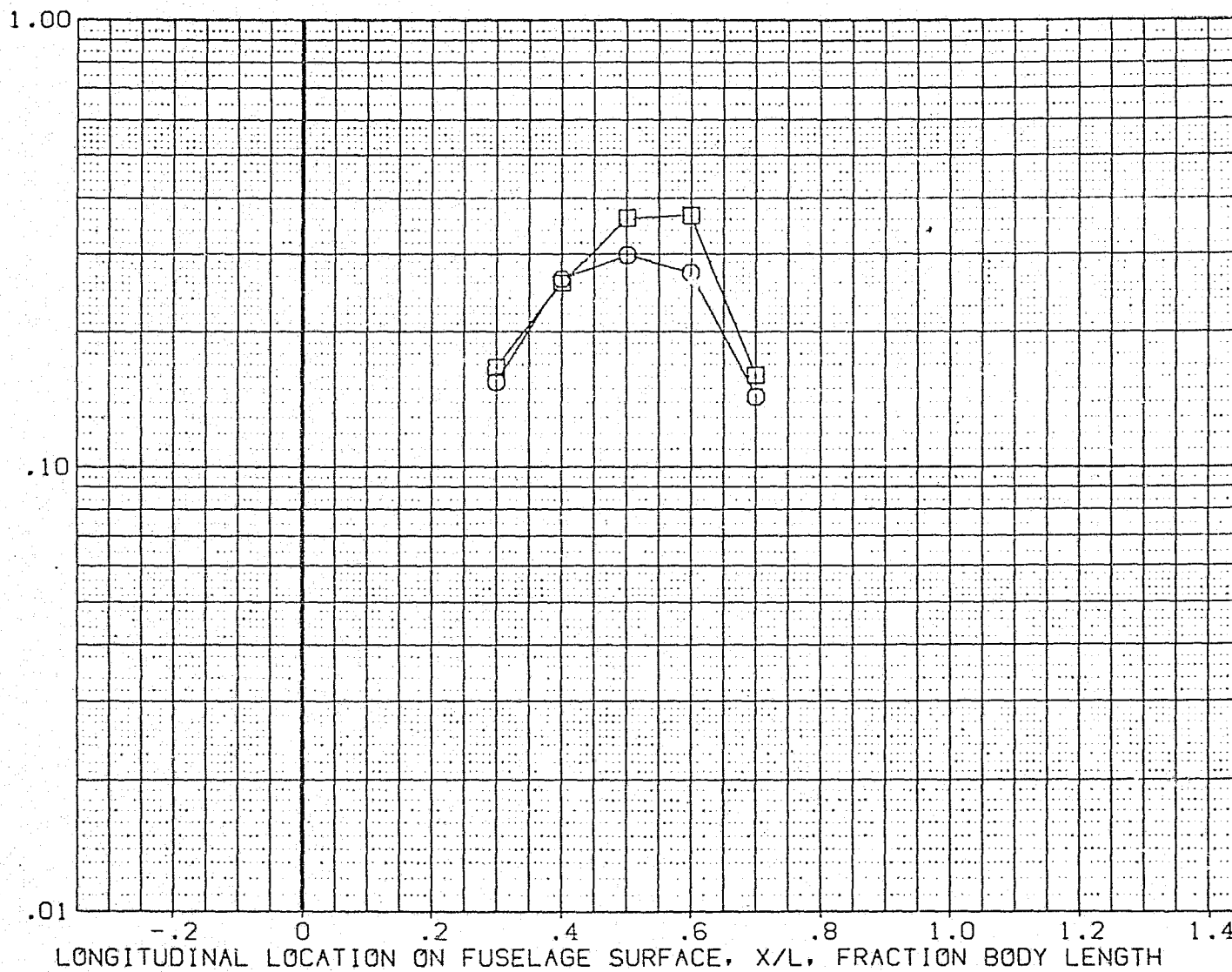
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF} 

FIG 11 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU08)

SYMBOL

RN/L

Z(WL)

HAW/HT

PARAMETRIC VALUES

☐ \circ
☐

 3.121
 5.244

465.000

.850

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

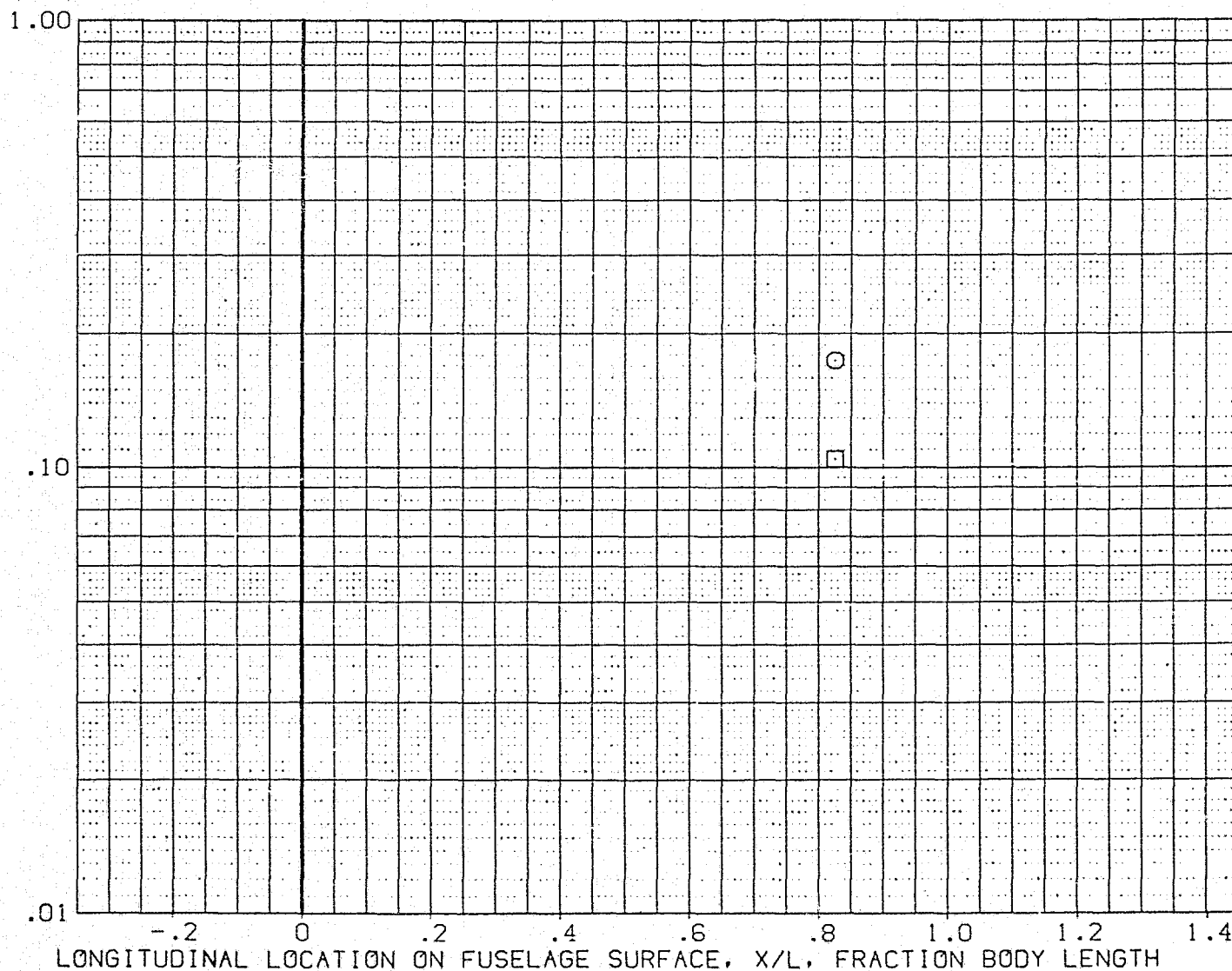


FIG 11 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RGSU08)

SYMBOL

RN/L

Z(W/L)

HAW/HT

PARAMETRIC VALUES

☐ ☐

 3.121
5.244

472.900

.850

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

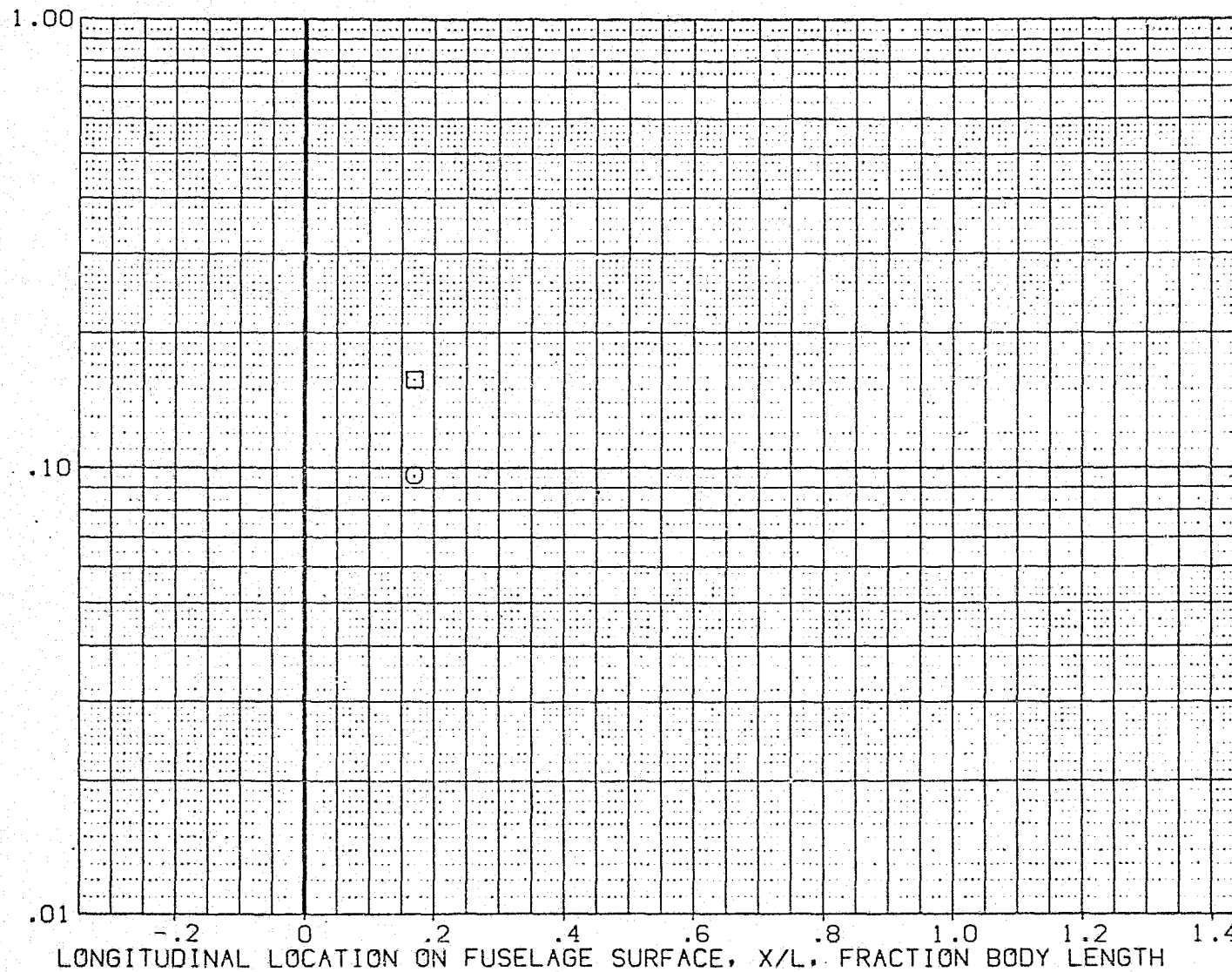


FIG 11. FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE (RQSU08)

SYMBOL

RN/L

Z(WL)

HAW/HT

□

3.121
5.244

501.000

.850

ALPHA

PARAMETRIC VALUES

30.000

BETA

1.000

HACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

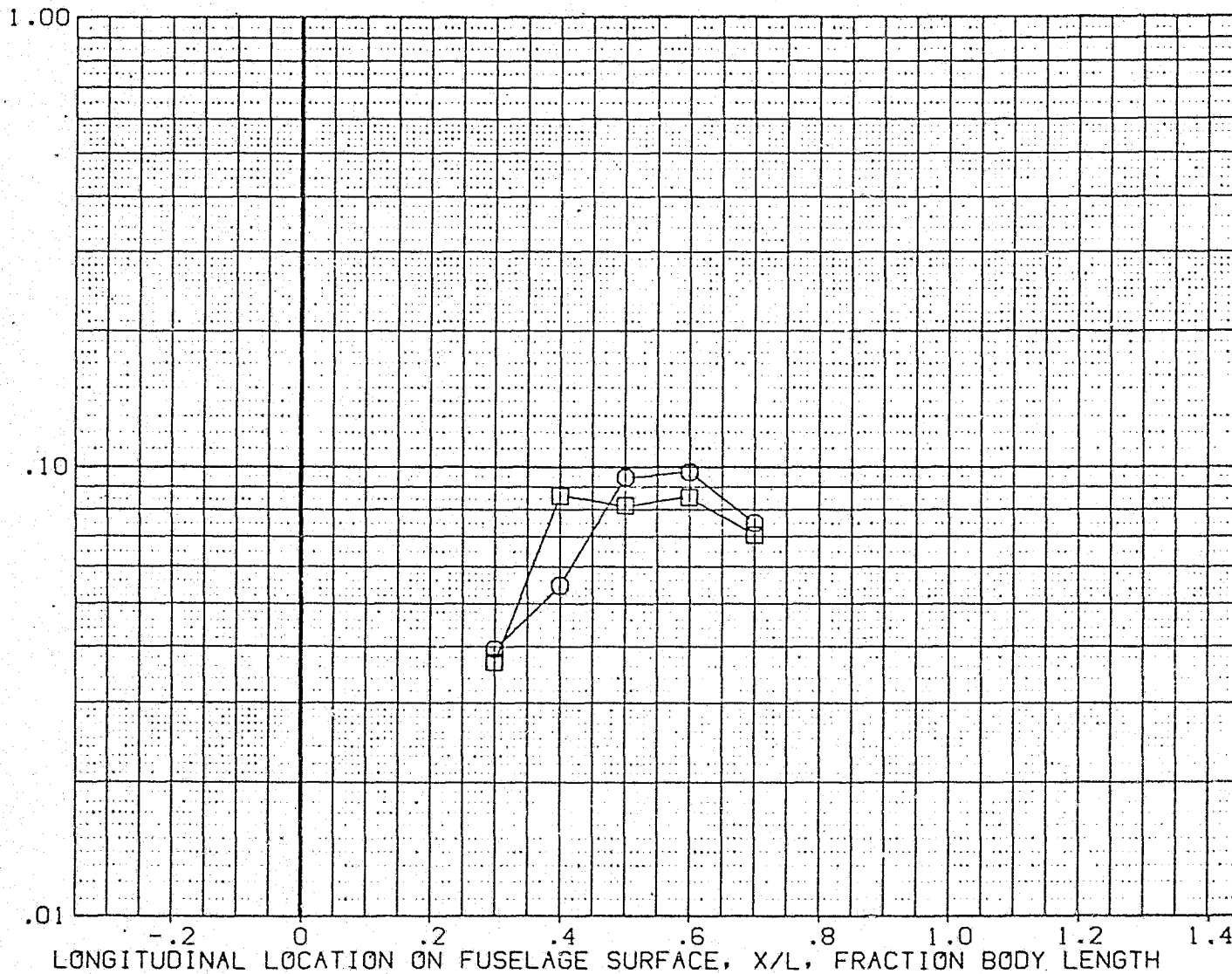


FIG 11 FUSELAGE SIDEWALL AND UPPER SURFACE DISTRIBUTION VAR.W/REYNOLDS NUMBER

OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW02)

SYMBOL

2Y/B

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

25.000

BETA

.000

MACH

6.000

ALPHAS

25.000

PHI

.000

PHIS

.000

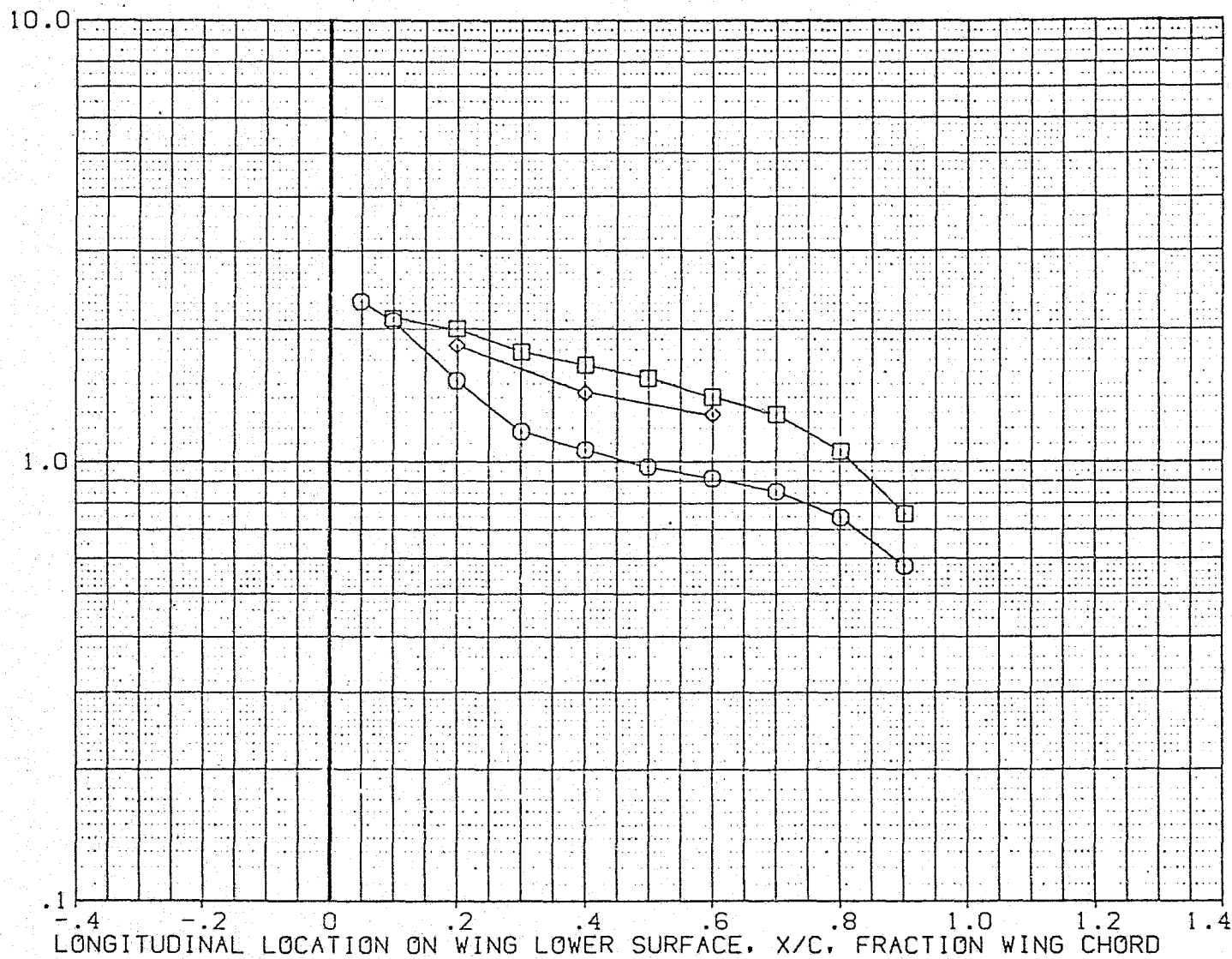
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 12 WING LOWER SURFACE DISTRIBUTION

OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW02)

SYMBOL

2Y/B

HAW/HT

RN/L

PARAMETRIC VALUES

○

.400

.900

3.034

ALPHA

25.000

BETA

.000

□

.600

MACH

6.000

ALPHAS

25.000

◇

.800

PHI

.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

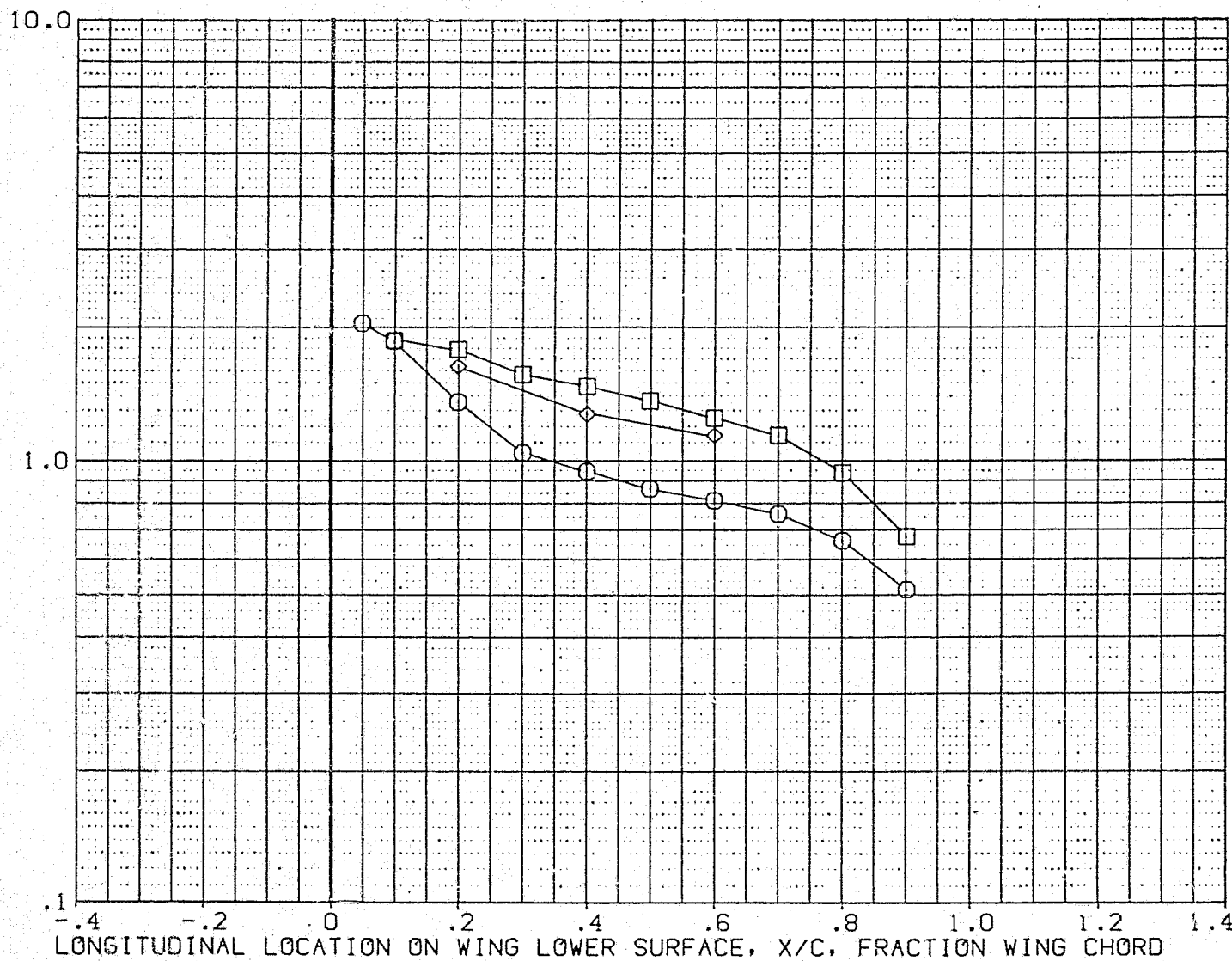


FIG 12 WING LOWER SURFACE DISTRIBUTION

0445

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW02)

SYMBOL	2Y/B	HAW/HT	RN/L
0.400	1.000	3.034	
0.600			
0.800			

PARAMETRIC VALUES			
ALPHA	25.000	BETA	.000
MACH	6.000	ALPHAS	25.000
PHI	.000	PHIS	.000

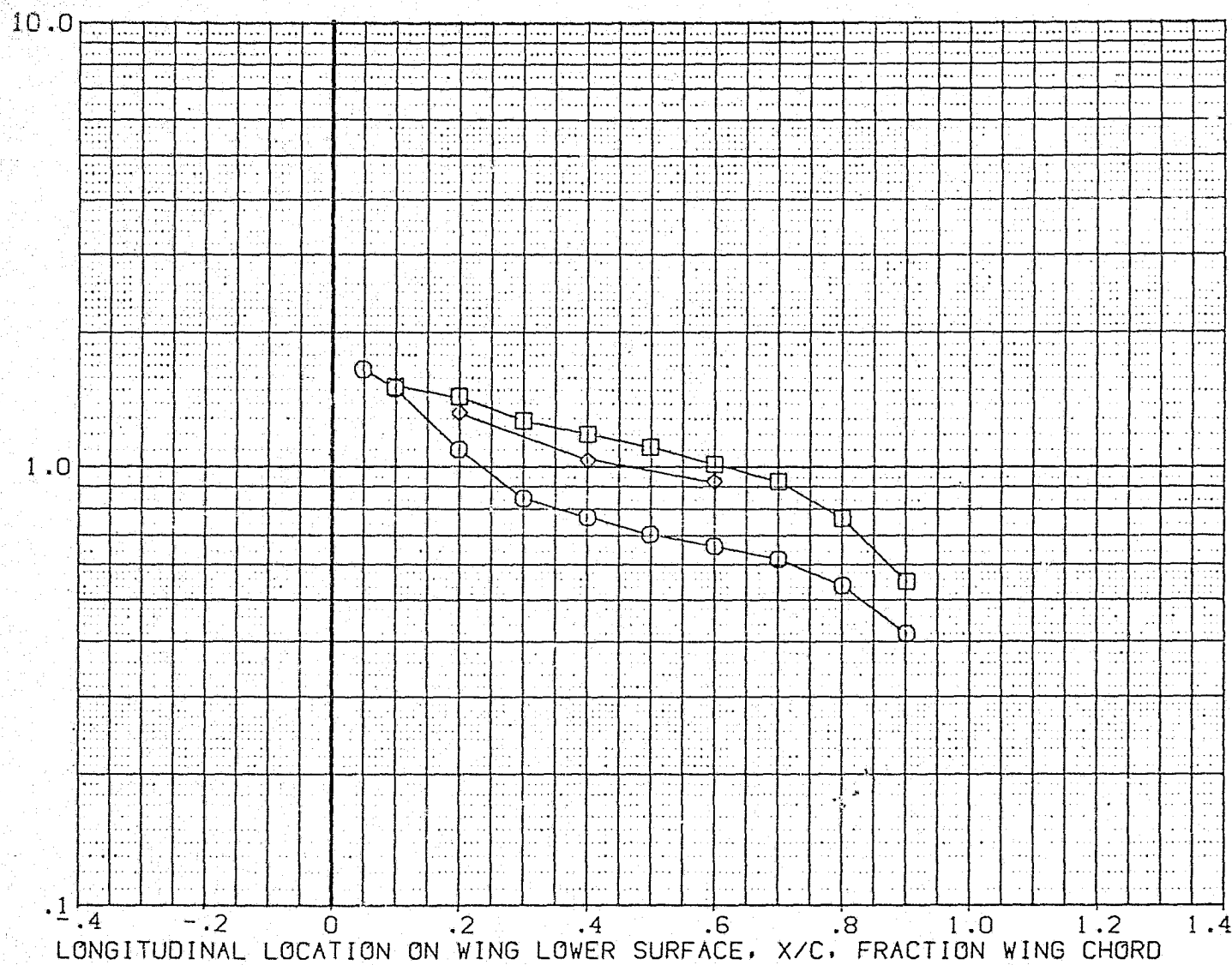
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW04)

SYMBOL

2Y/B

HAW/HT

RN/L

○
□
◇

.400

.850

3.221

.600

.800

PARAMETRIC VALUES

ALPHA

35.000

BETA

.000

MACH

6.000

ALPHAS

35.000

PHI

.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

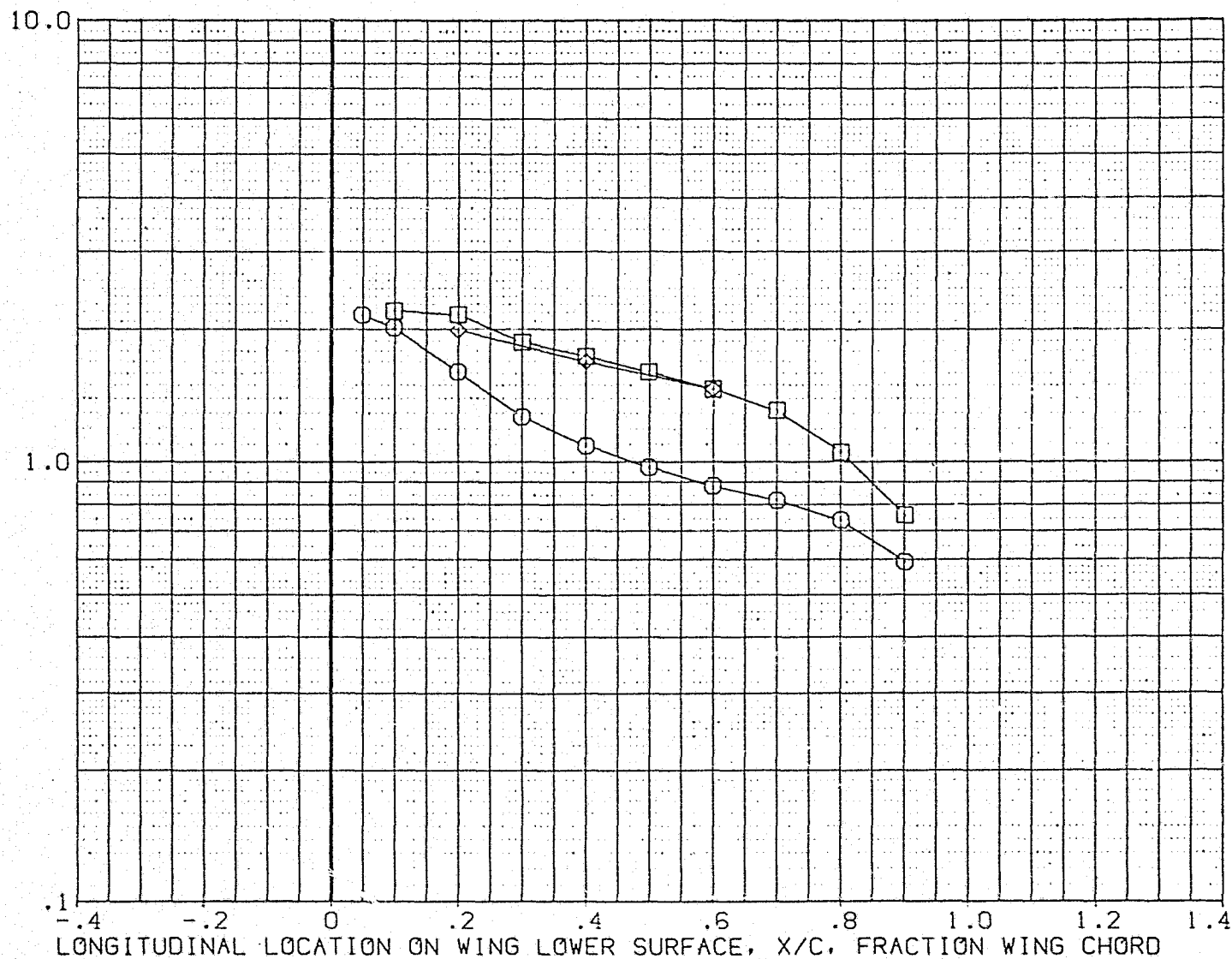


FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW04)

SYMBOL

2Y/B

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

35.000

BETA

.000

MACH

6.000

ALPHAS

35.000

PHI

.000

PHIS

.000

.400
 .600
 .800

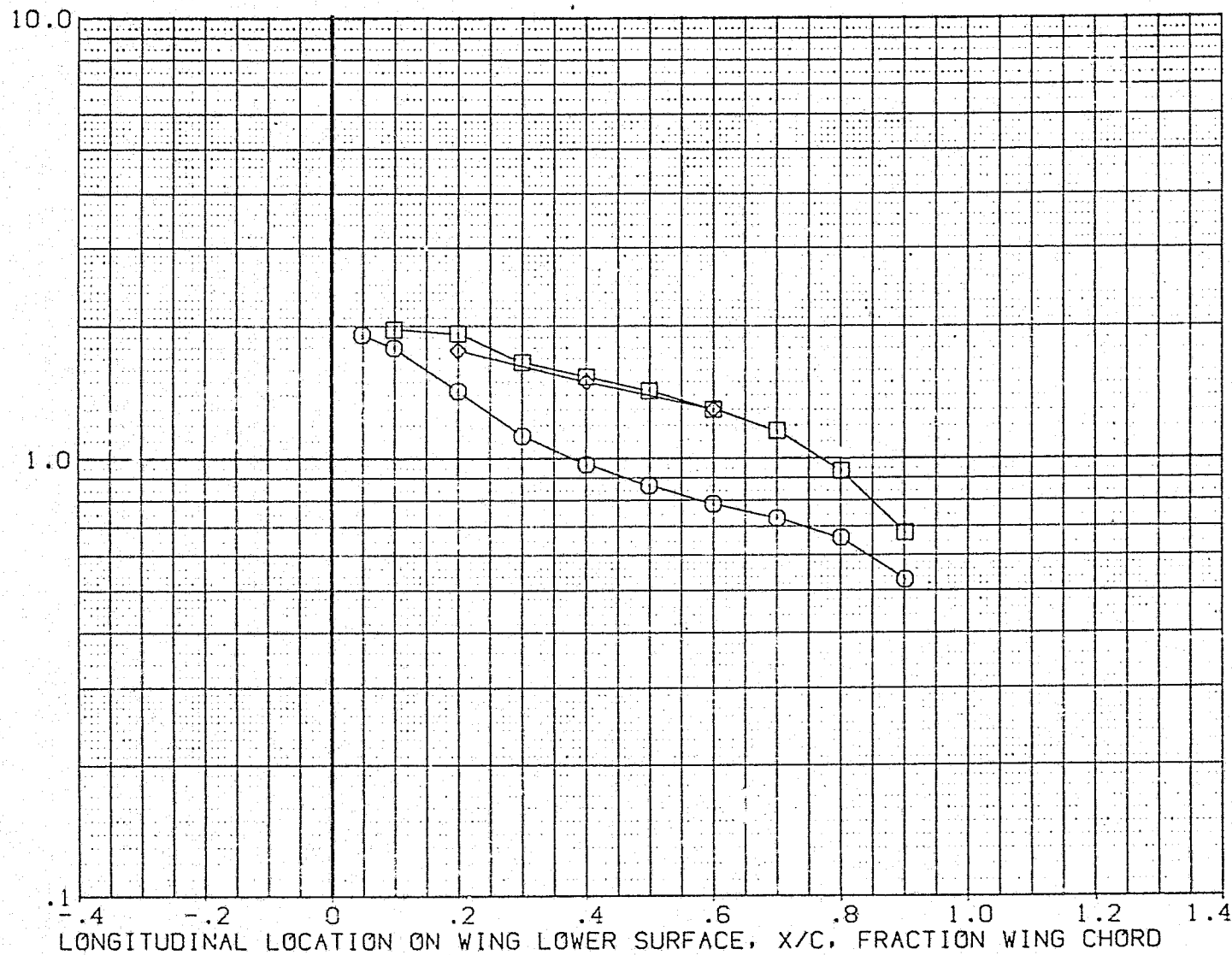
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW04)

SYMBOL

2Y/B

HAW/HT

RN/L

PARAMETRIC VALUES

◇ □ ○

.400

1.000

3.221

ALPHA

35.000

BETA

.000

MACH

6.000

ALPHAS

35.000

PHI

.000

PHIS

.000

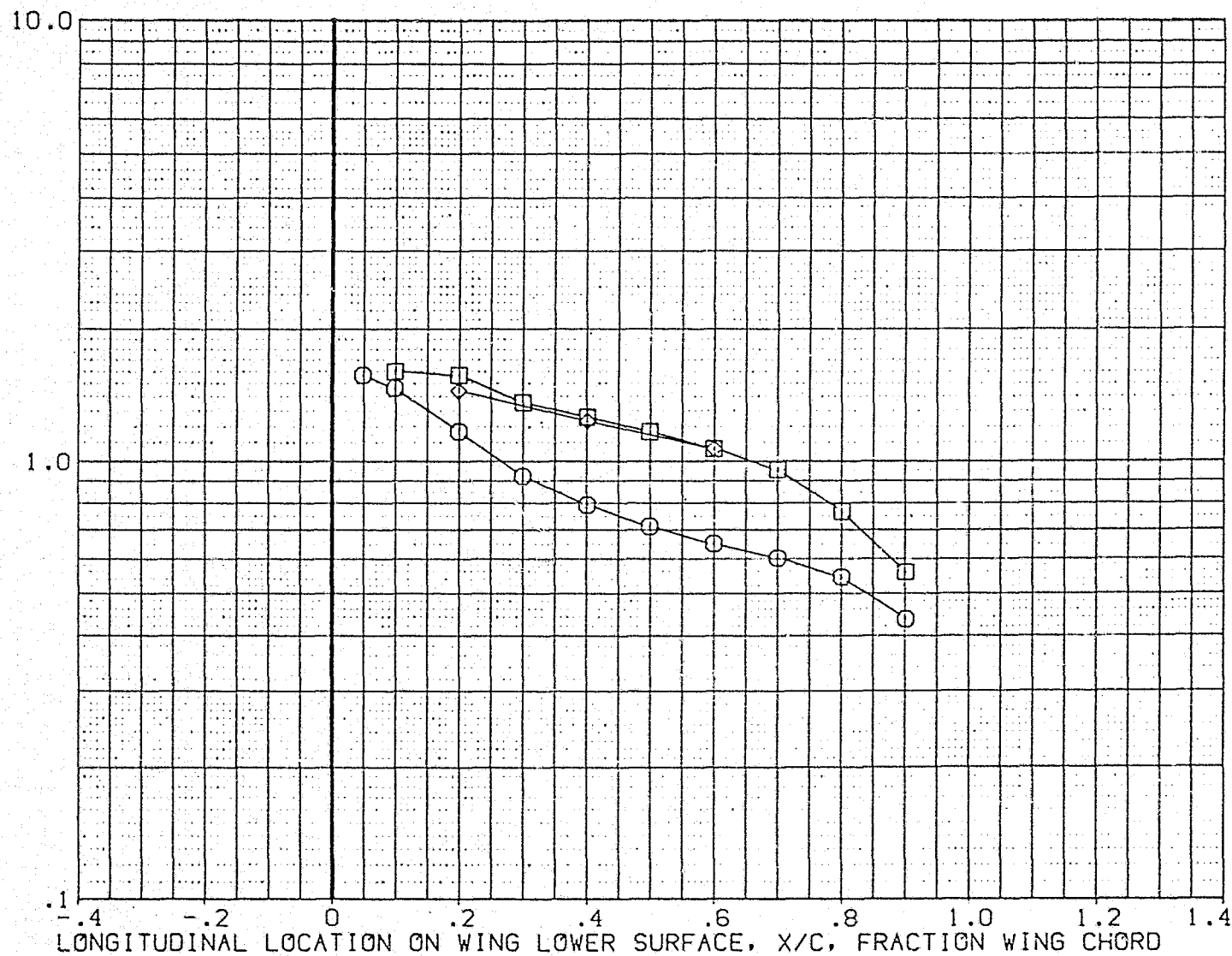
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW06)

SYMBOL

2Y/B

HAW/HT

RN/L

○
□
◇

.400

.850

2.987

.600

.800

PARAMETRIC VALUES

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

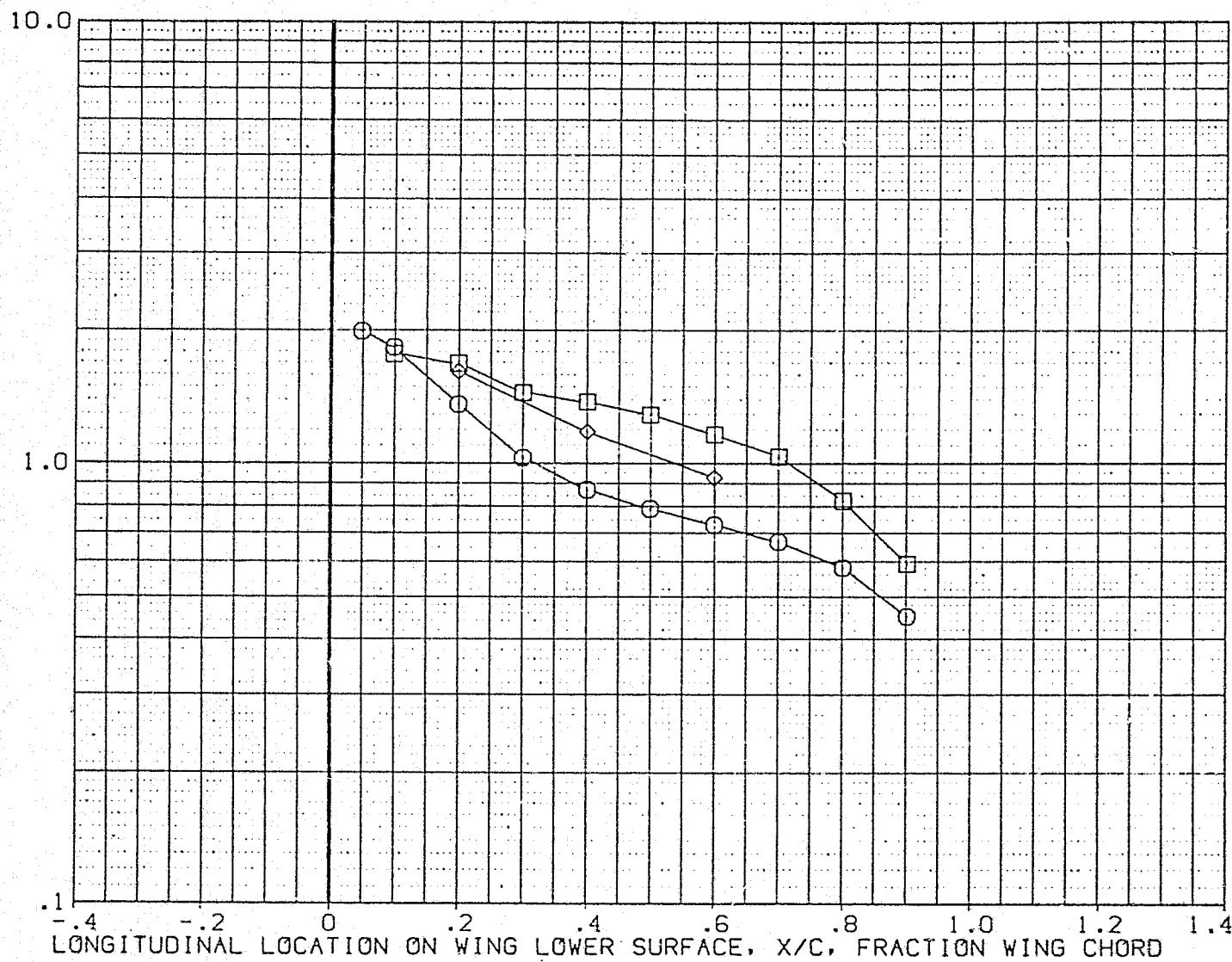
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 12 WING LOWER SURFACE DISTRIBUTION.

OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW06)

SYMBOL

2Y/B

HAW/HT

RN/L

PARAMETRIC VALUES

○

.400

.900

2.987

ALPHA

30.000

BETA

.000

□

.600

MACH

6.000

ALPHAS

30.000

◇

.800

PHI

.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

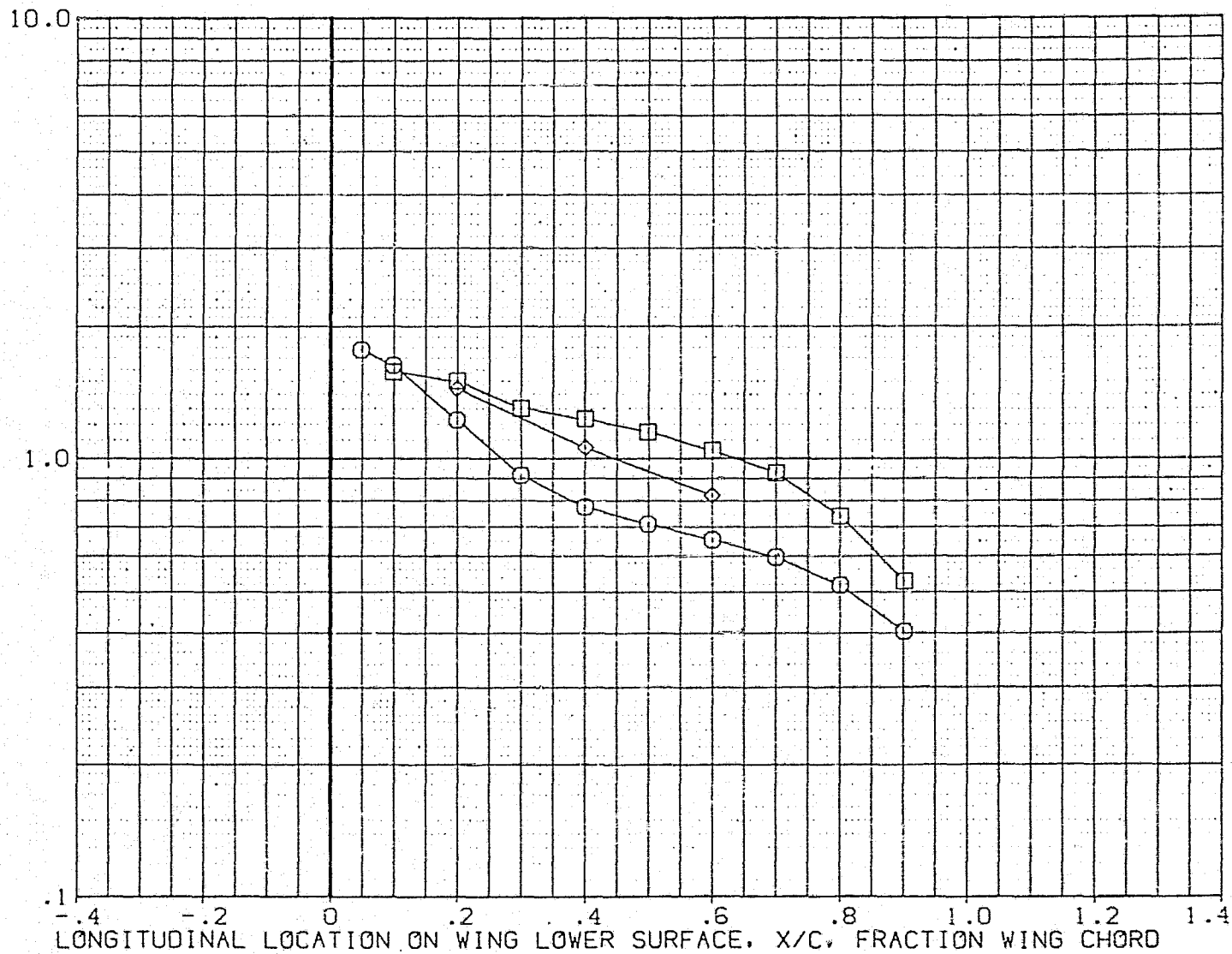


FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW06)

SYMBOL

2Y/B

HAW/HT

RN/L

PARAMETRIC VALUES

○

.400

1.000

2.987

ALPHA

30.000

BETA

.000

□

.600

MACH

6.000

ALPHAS

30.000

◇

.800

PHI

.000

PHIS

.000

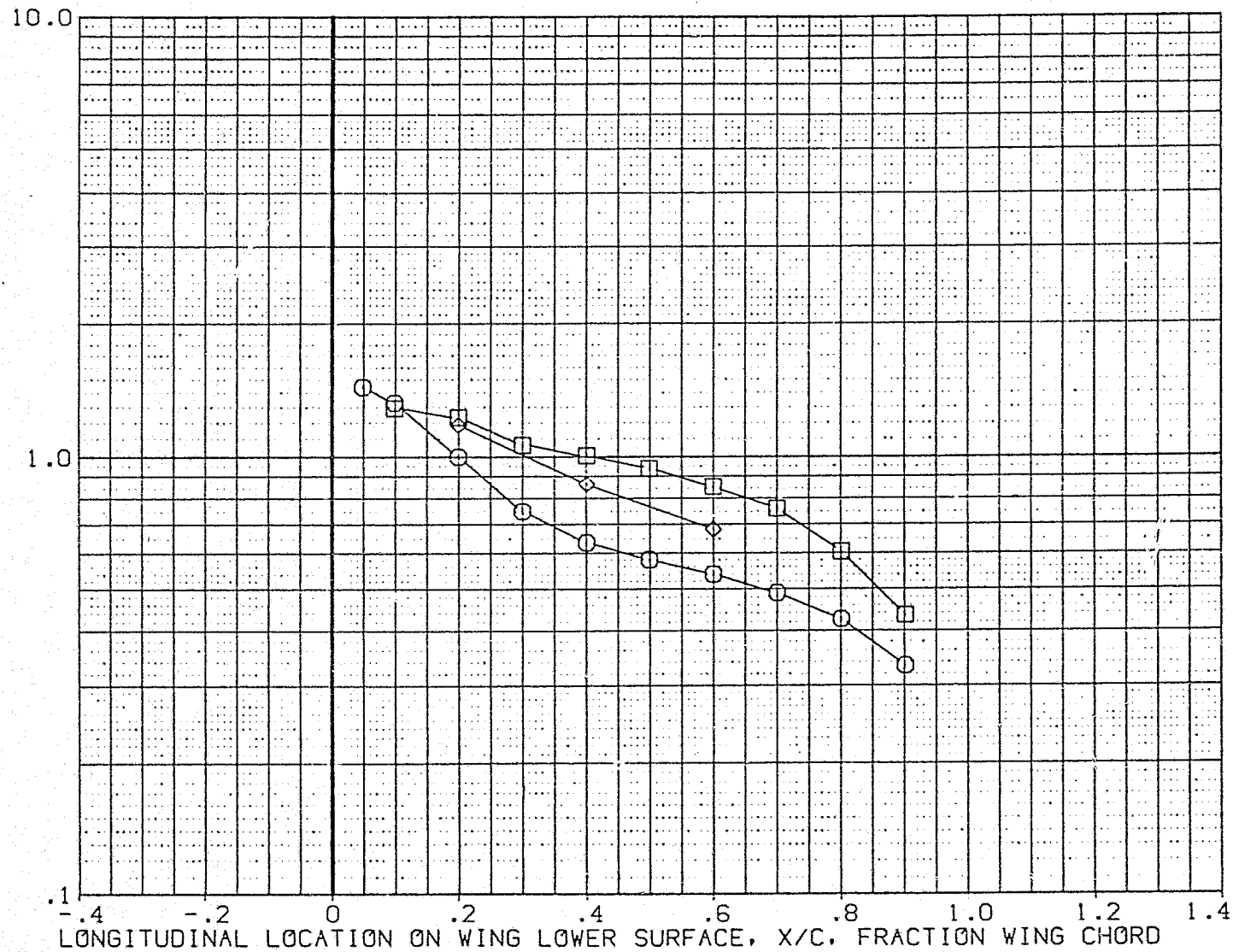
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW06)

SYMBOL

2Y/B

HAW/HT

RN/L

PARAMETRIC VALUES

○
□
◇

.400
.600
.800

.850

5.313

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

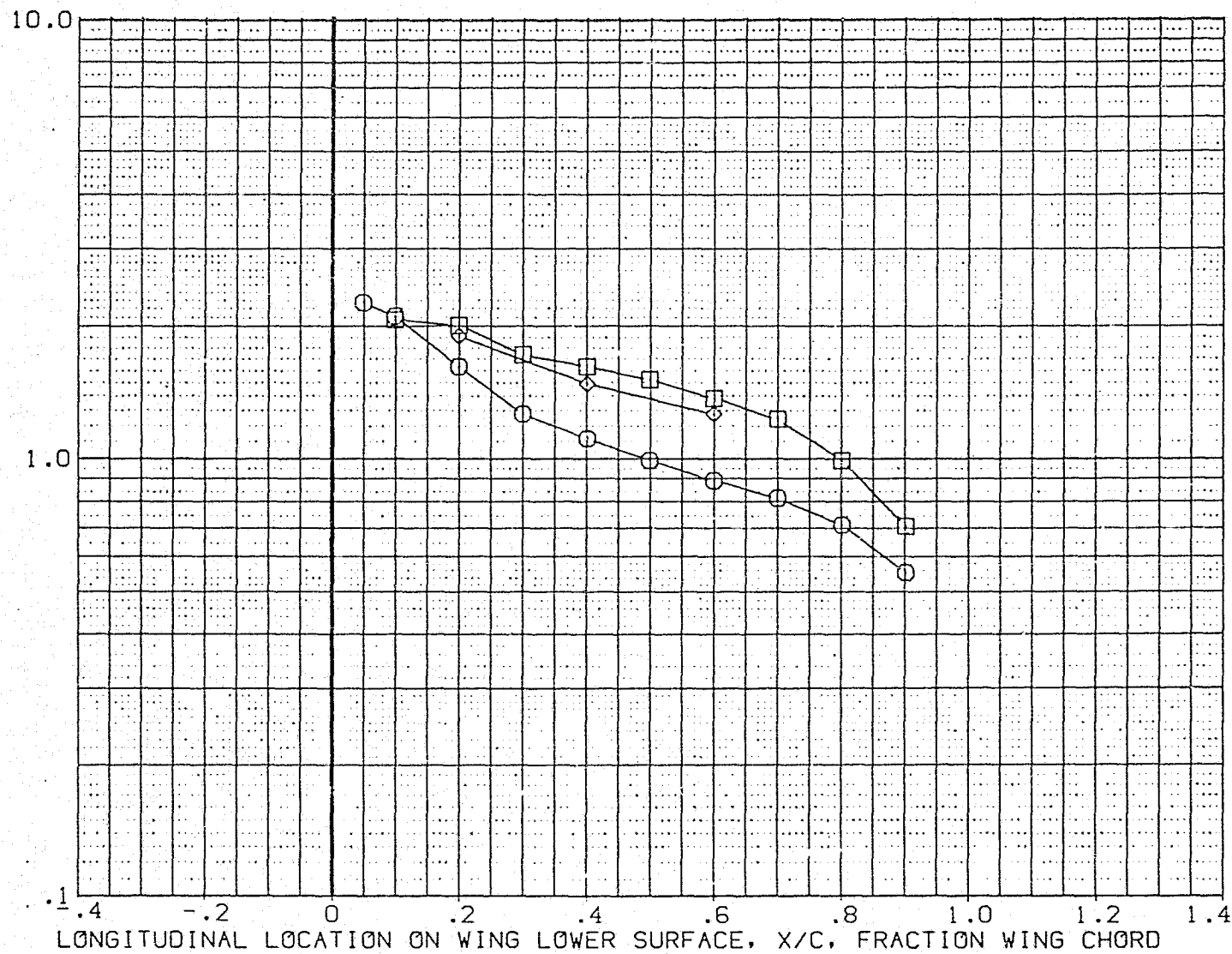


FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW06)

SYMBOL

2Y/B

HAW/HT

RN/L

PARAMETRIC VALUES

○
□
◇

.400
.600
.800

.900

5.313

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

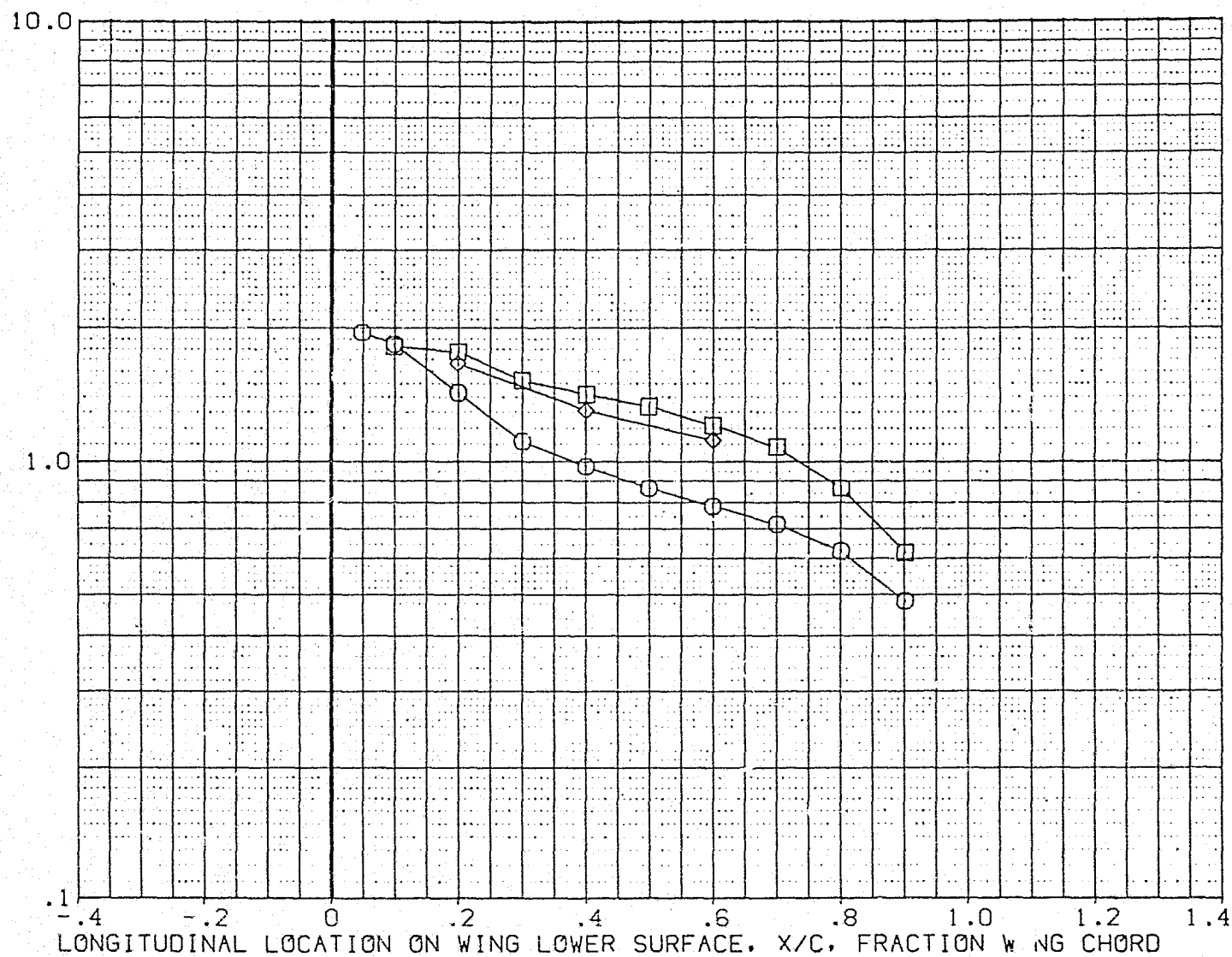
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW06)

SYMBOL

Z/Y/B

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

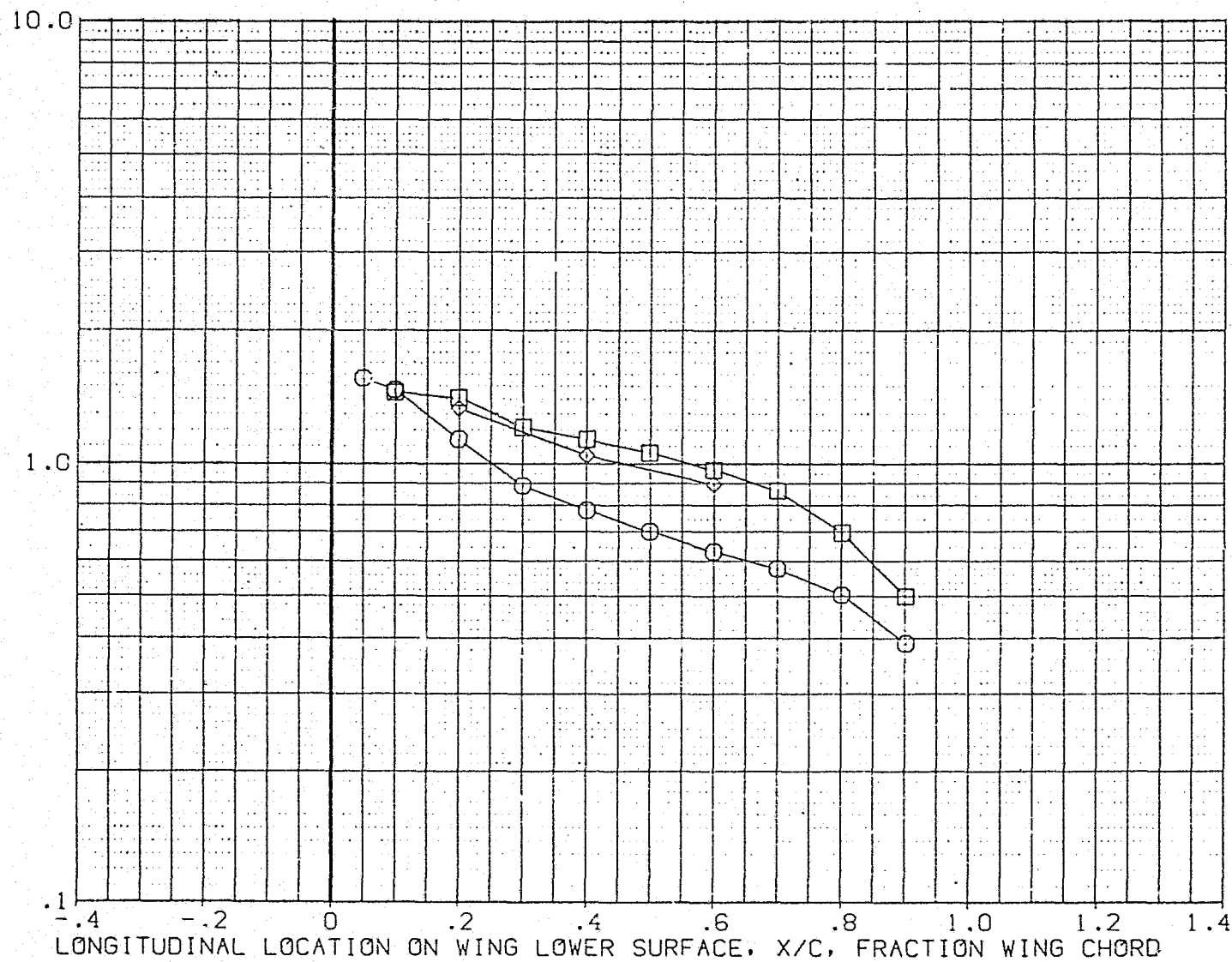


FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M1V7F5 WING LOWER SURFACE

(RQSW08)

SYMBOL

2Y/B

HAW/HT

RN/L

PARAMETRIC VALUES

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

\diamond
 \square
 \circ

.400
 .600
 .800

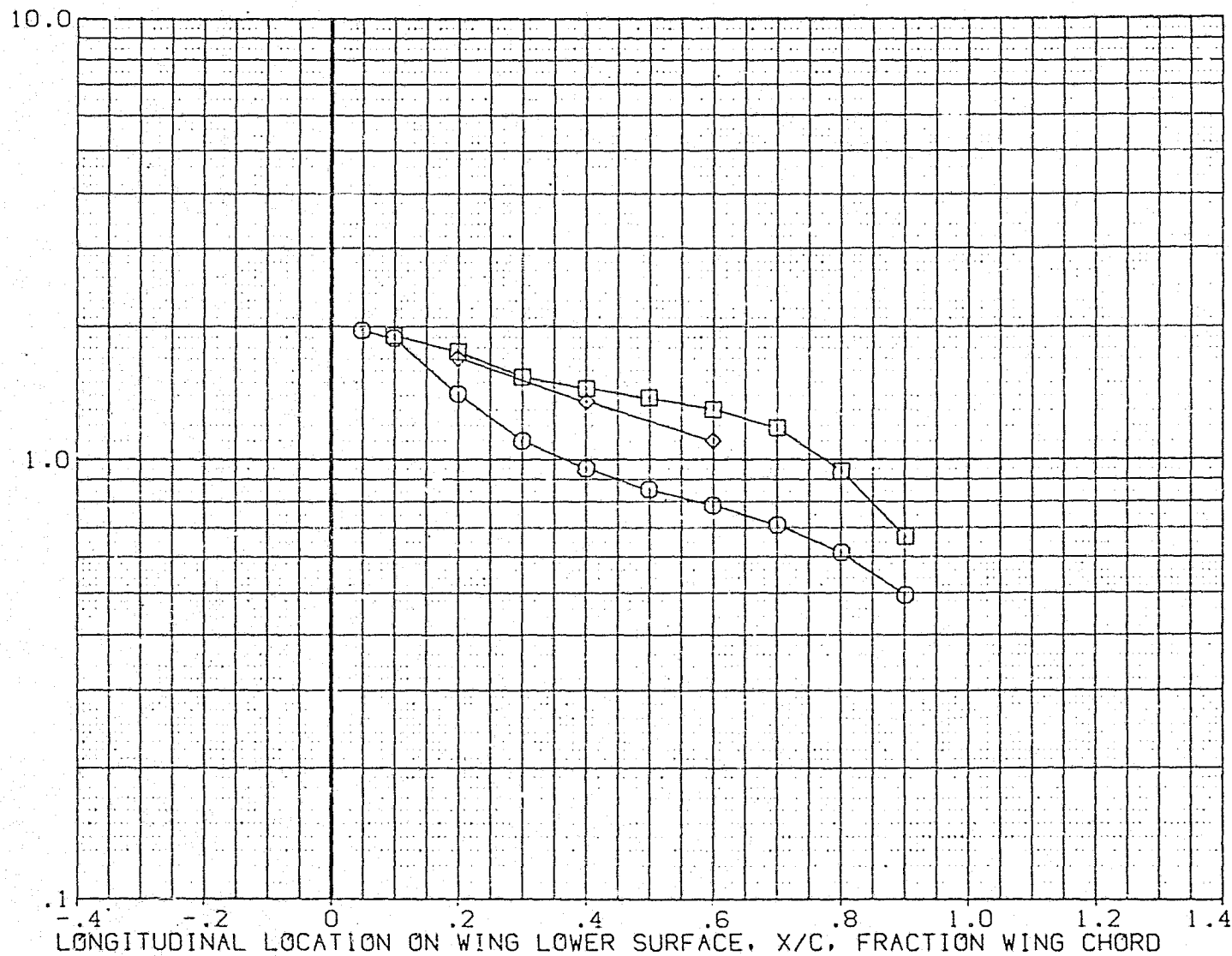
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW08)

SYMBOL

2Y/B

HAW/HT

RN/L

○
□
◇

.400

.900

3.121

.600

.800

PARAMETRIC VALUES

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

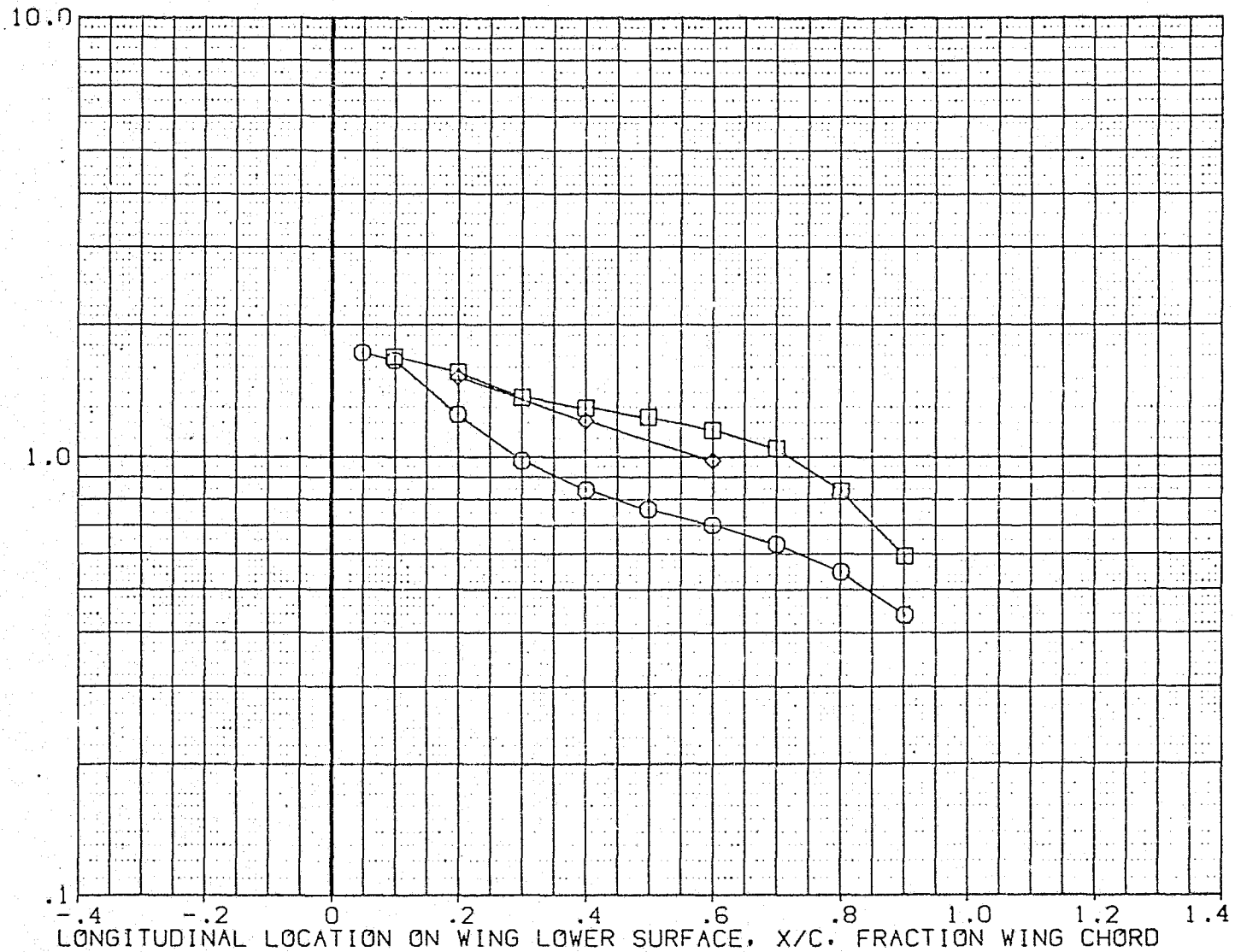


FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW08)

SYMBOL

2Y/B

HAW/HT

RN/L

○
□
◇

.400
.600
.800

1.000

3.121

ALPHA

PARAMETRIC VALUES

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

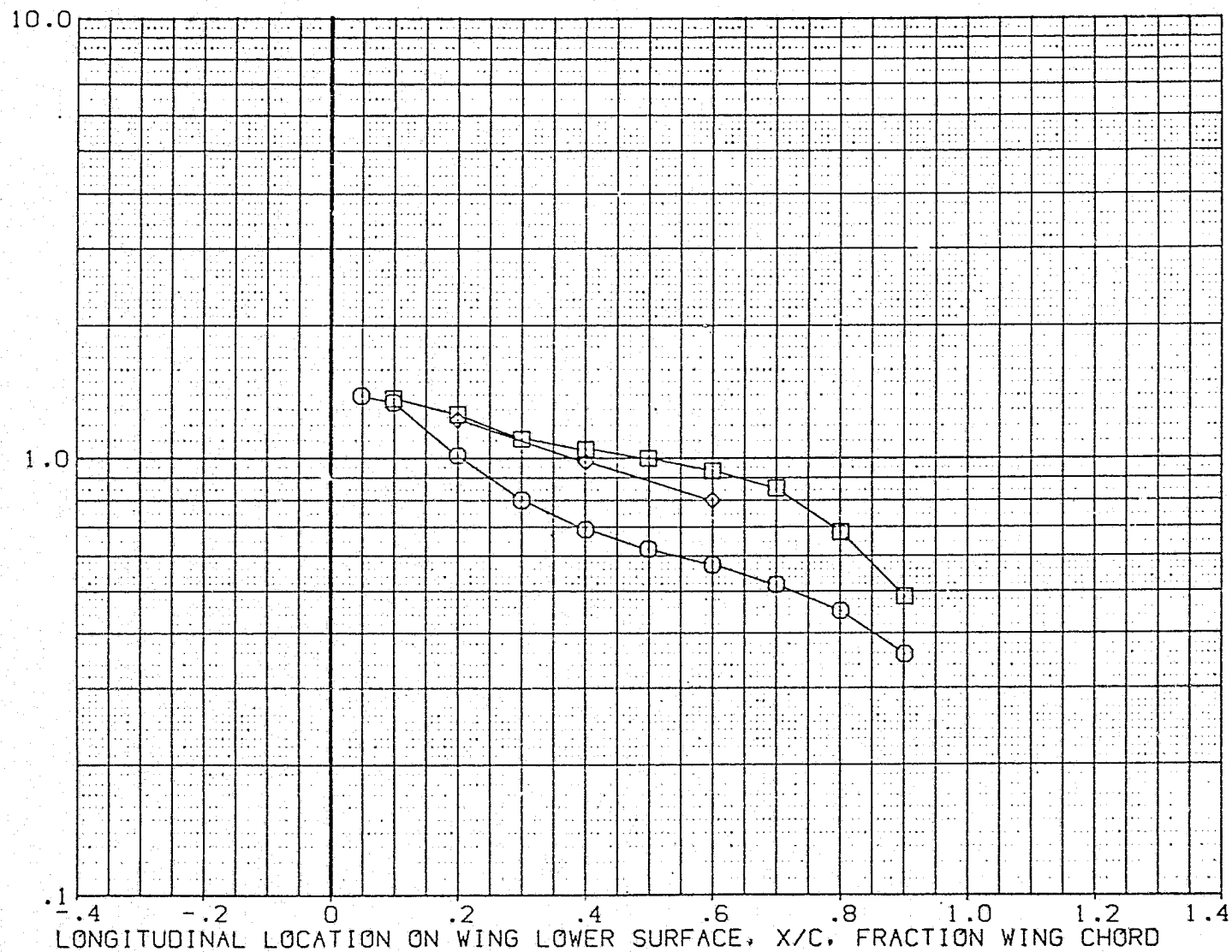


FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW08)

SYMBOL

2Y/B

HAW/HT

RN/L

.400

.850

5.244

.600

.800

PARAMETRIC VALUES

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

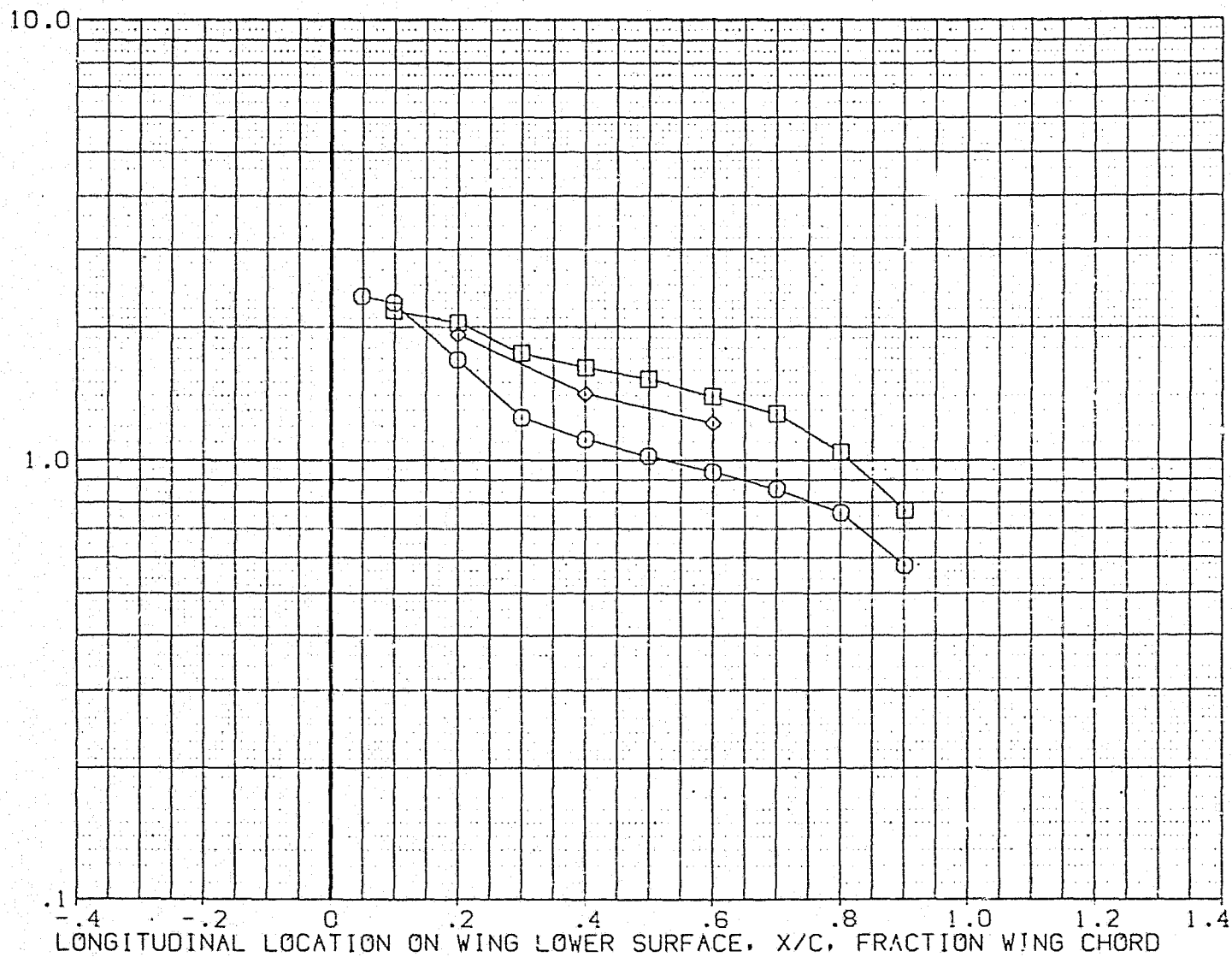
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW08)

SYMBOL

2Y/B

HAW/HT

RN/L

◇ □ ○

.400

.900

5.244

.600

.800

PARAMETRIC VALUES

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

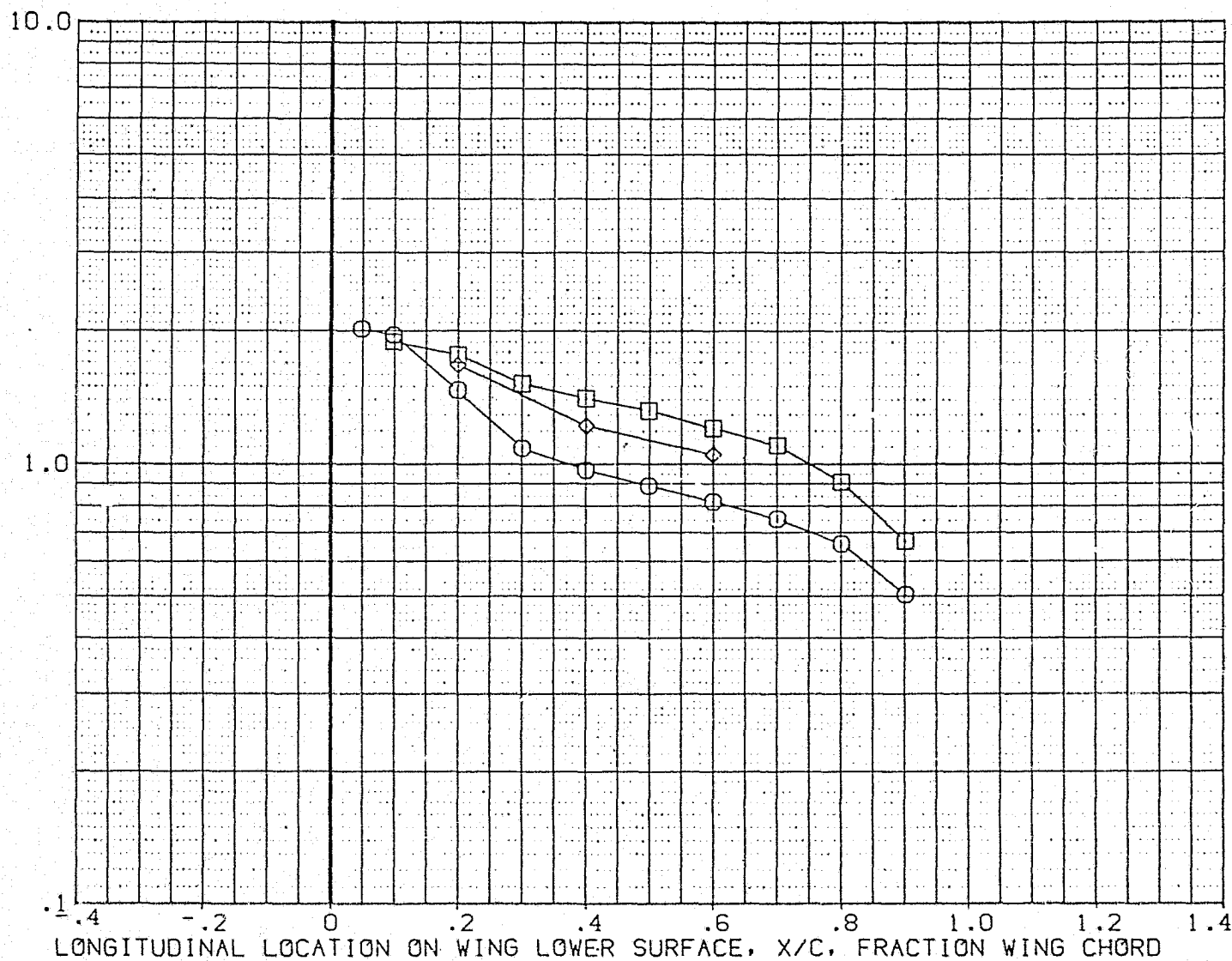
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 12 WING LOWER SURFACE DISTRIBUTION

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW08)

SYMBOL

2Y/B

HAW/HT

RN/L

PARAMETRIC VALUES

○

.400

1.000

5.244

ALPHA

30.000

BETA

1.000

□

.600

MACH

6.000

ALPHAS

30.000

◇

.800

PHI

-2.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

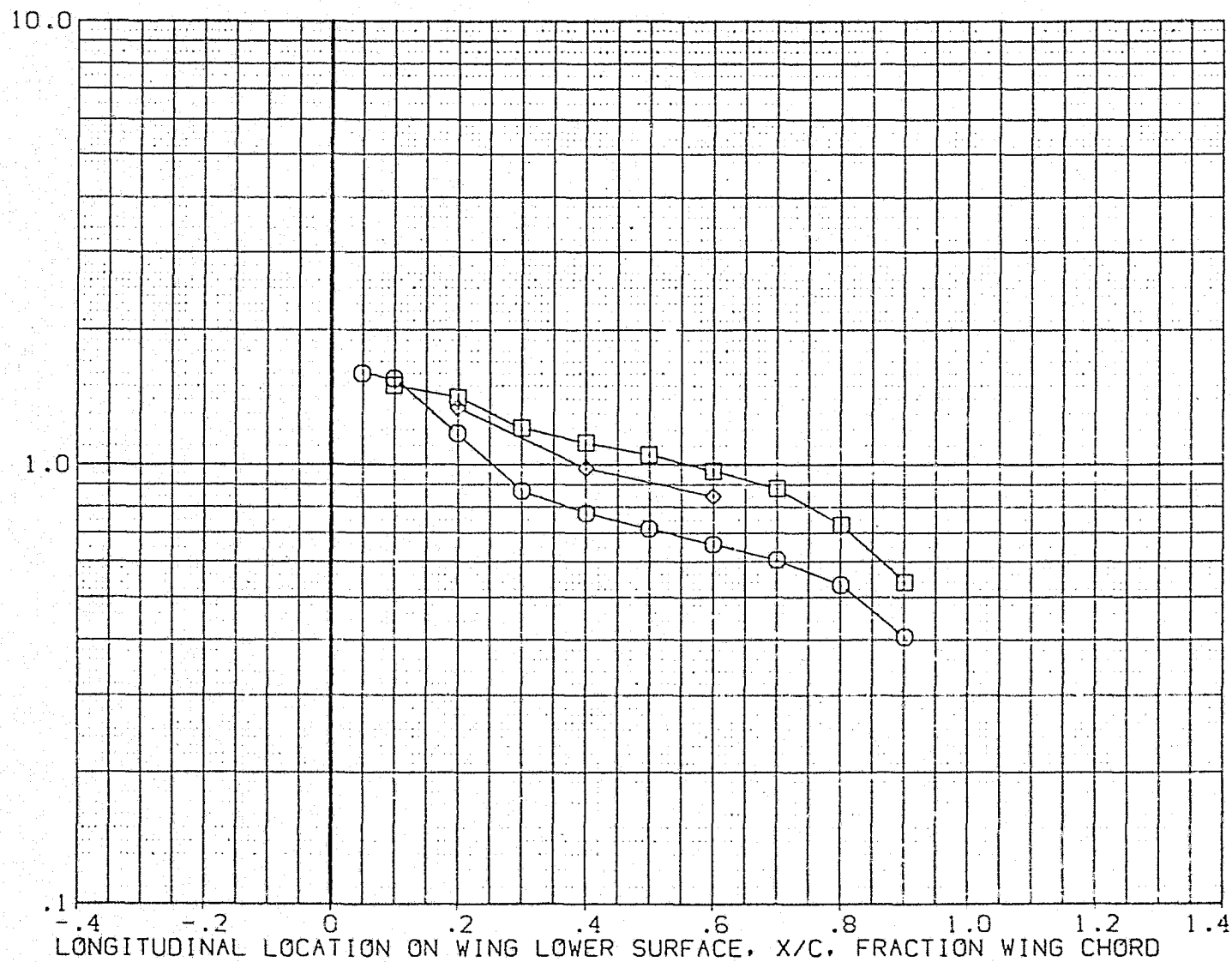


FIG 12 WING LOWER SURFACE DISTRIBUTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R05W02)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	25.000	.000	6.000
(R05W04)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	35.000	.000	6.000
(R05W06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000

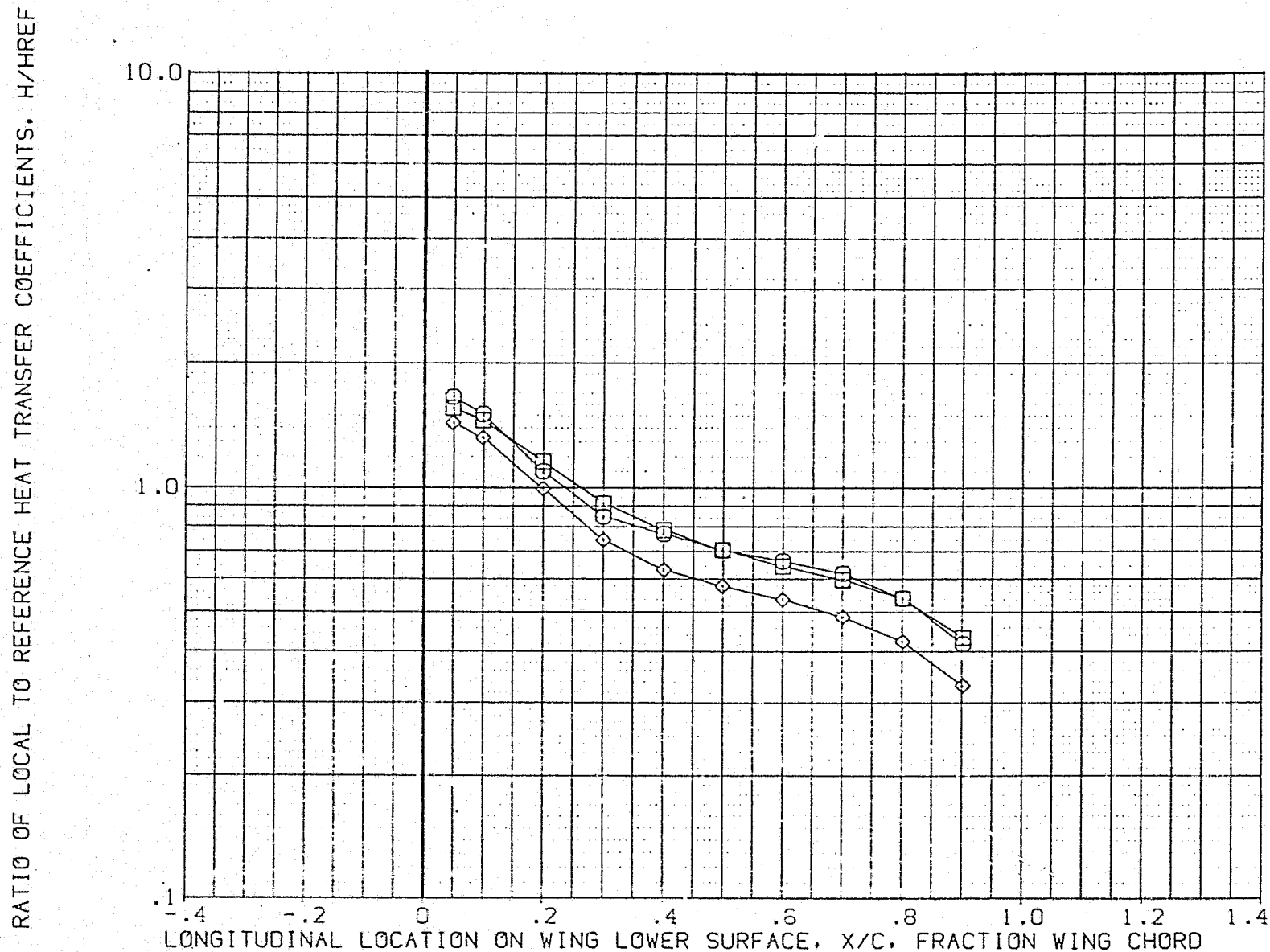





FIG 13 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF ATTACK

RN/L = 3.034 HAW/HT = 1.000 ZY/B = .400

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SW02)		0H45 B22C7W111M4V7F5 WING LOWER SURFACE	25.000	.000	6.000
(R0SW04)		0H45 B22C7W111M4V7F5 WING LOWER SURFACE	35.000	.000	6.000
(R0SW06)		0H45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

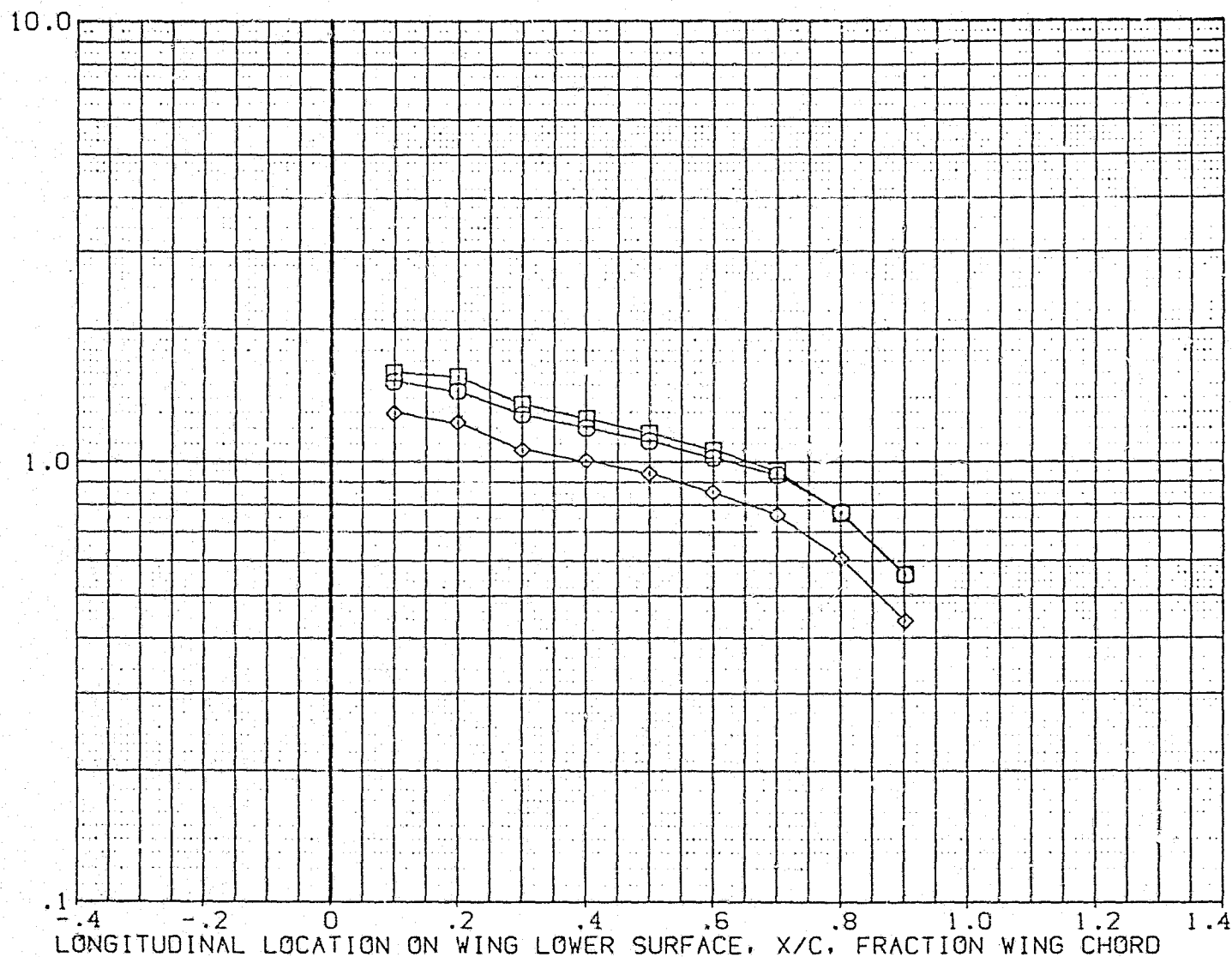


FIG 13 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF ATTACK

RN/L = 3.034 HAW/HT = 1.000 2Y/B = .600

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SW02)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	25.000	.000	6.000
(R0SW04)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	35.000	.000	6.000
(R0SW06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

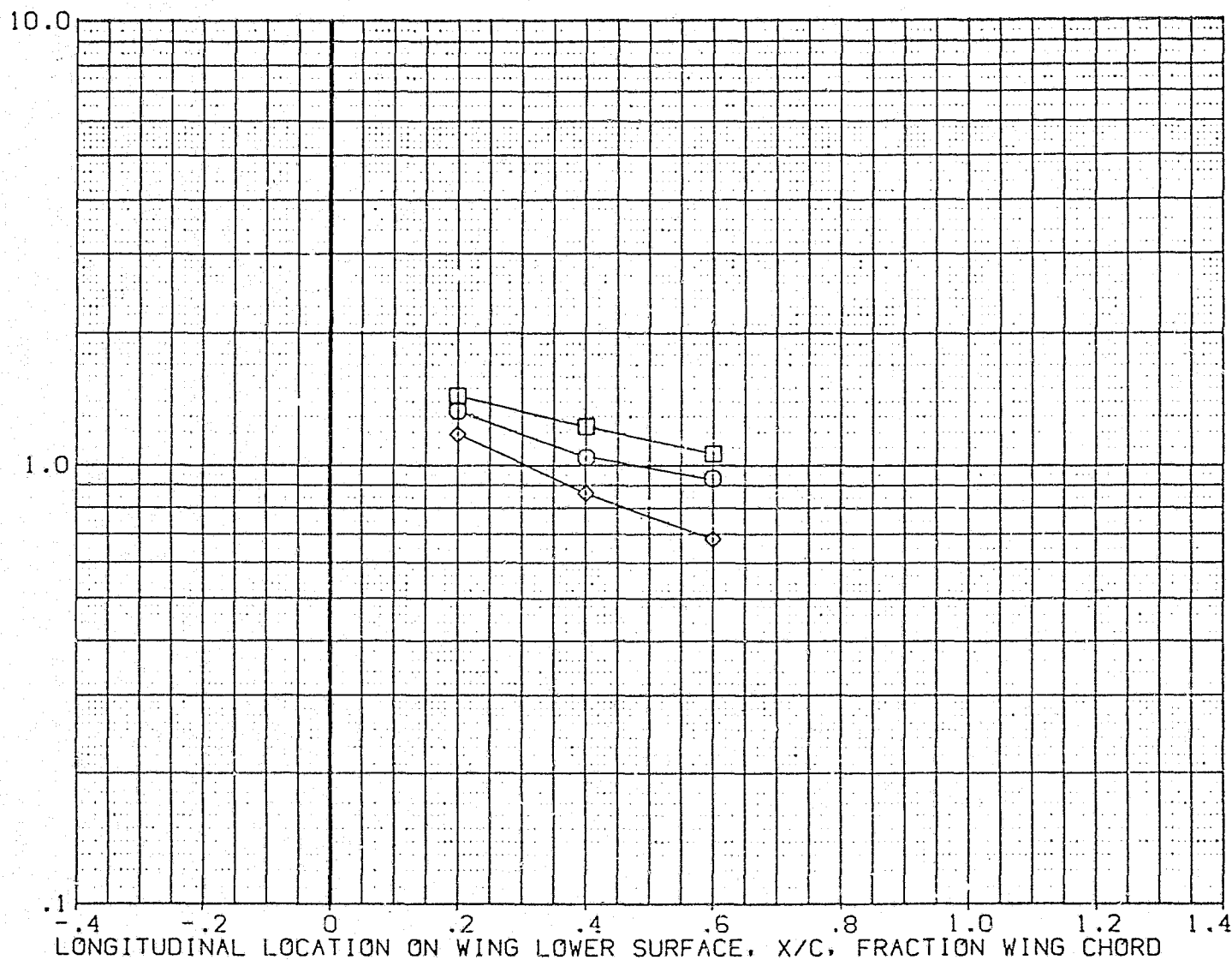




FIG 13 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF ATTACK

RN/L = 3.034 HAW/HT= 1.000 2Y/B = .800

PAGE 120

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(R0SW06)  OH45 B22C7W111M4V7F5 WING LOWER SURFACE
(R0SW08)  OH45 B22C7W111M4V7F5 WING LOWER SURFACE

ALPHA BETA MACH
30.000 .000 6.000
30.000 1.000 6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

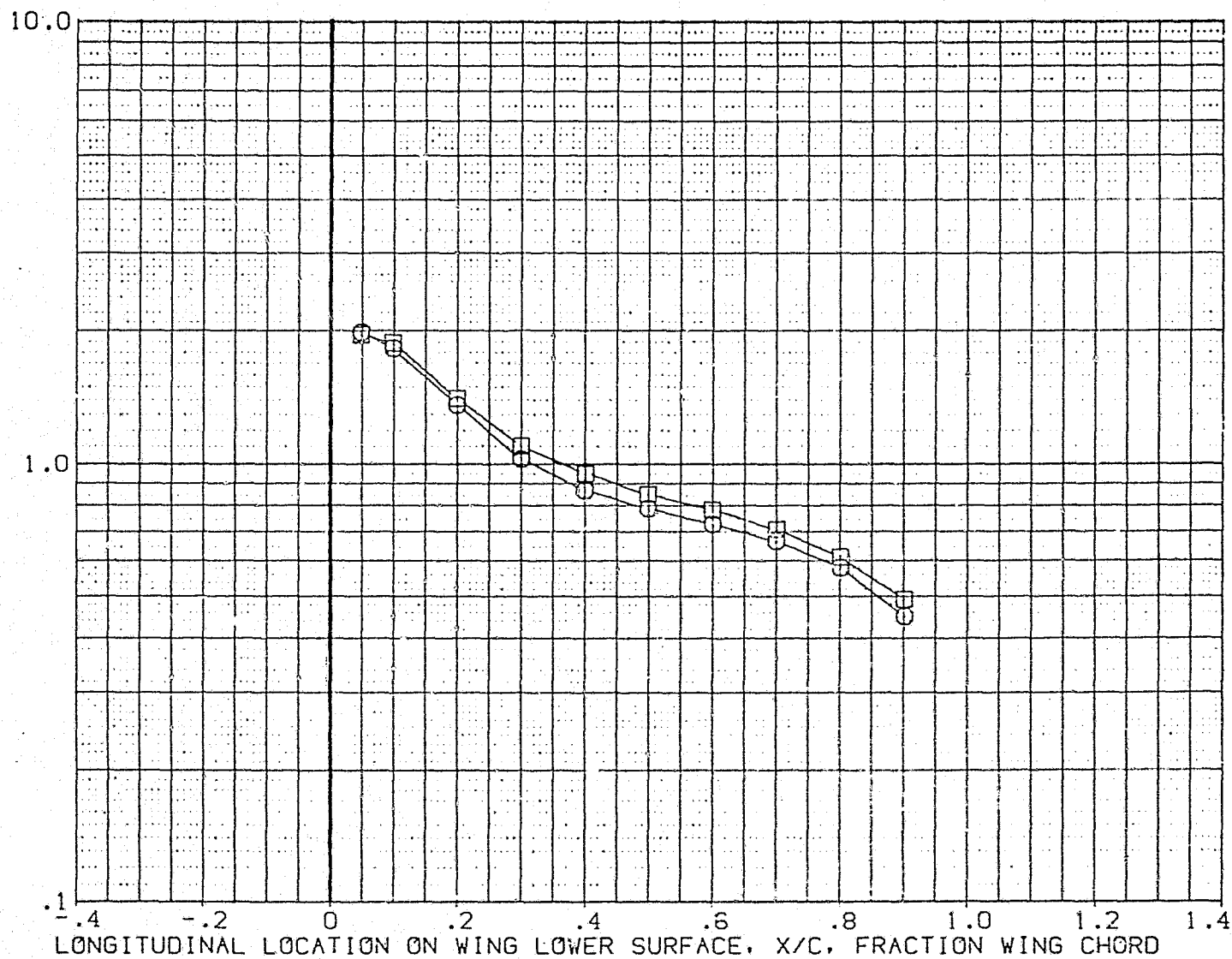


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.987 HAW/HT = .850 $2Y/B$ = .400

PAGE 121

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSW06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(RQSW08)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

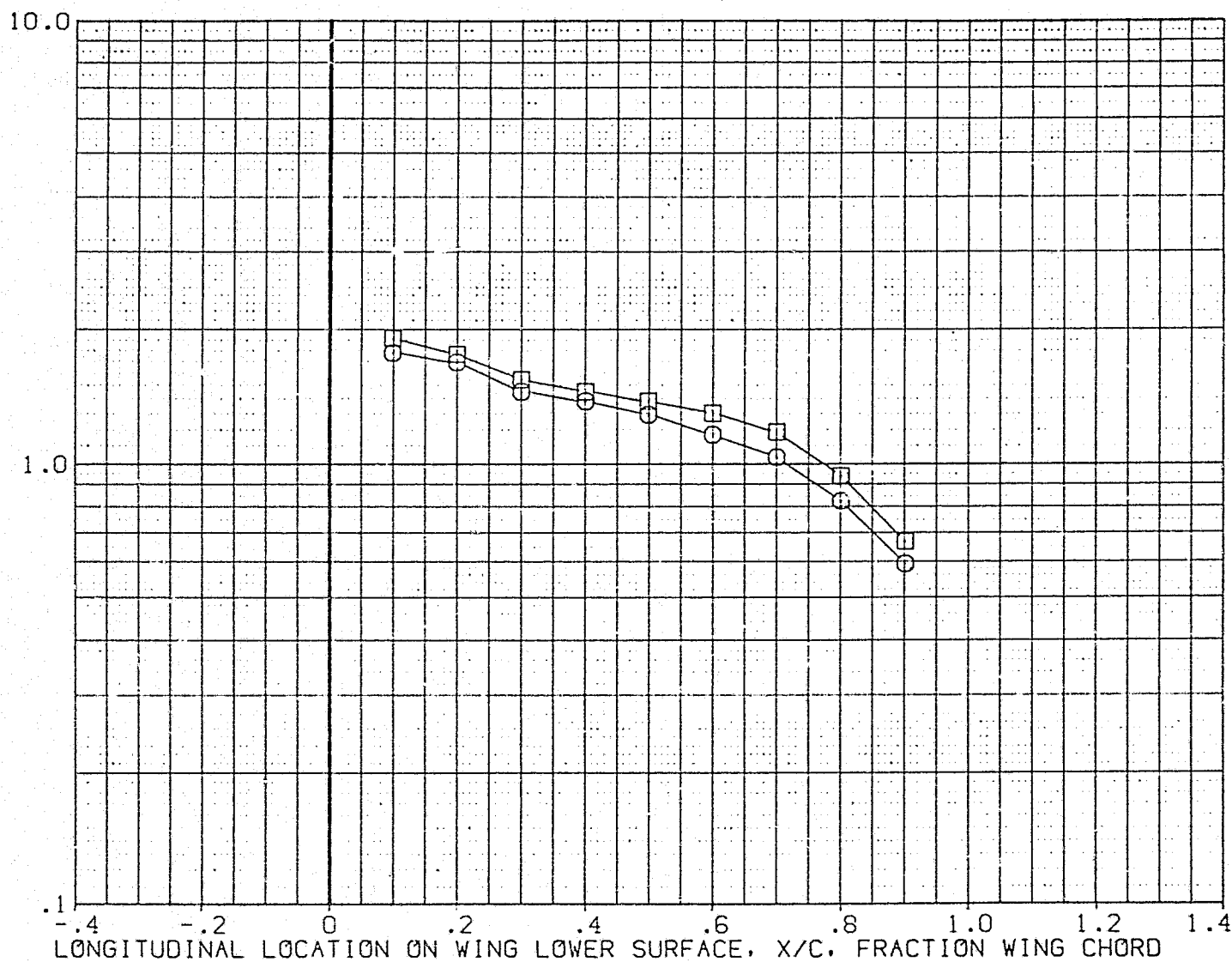


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.987 HAW/HT = .850 2Y/B = .800

PAGE 122

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R05W06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(R05W08)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

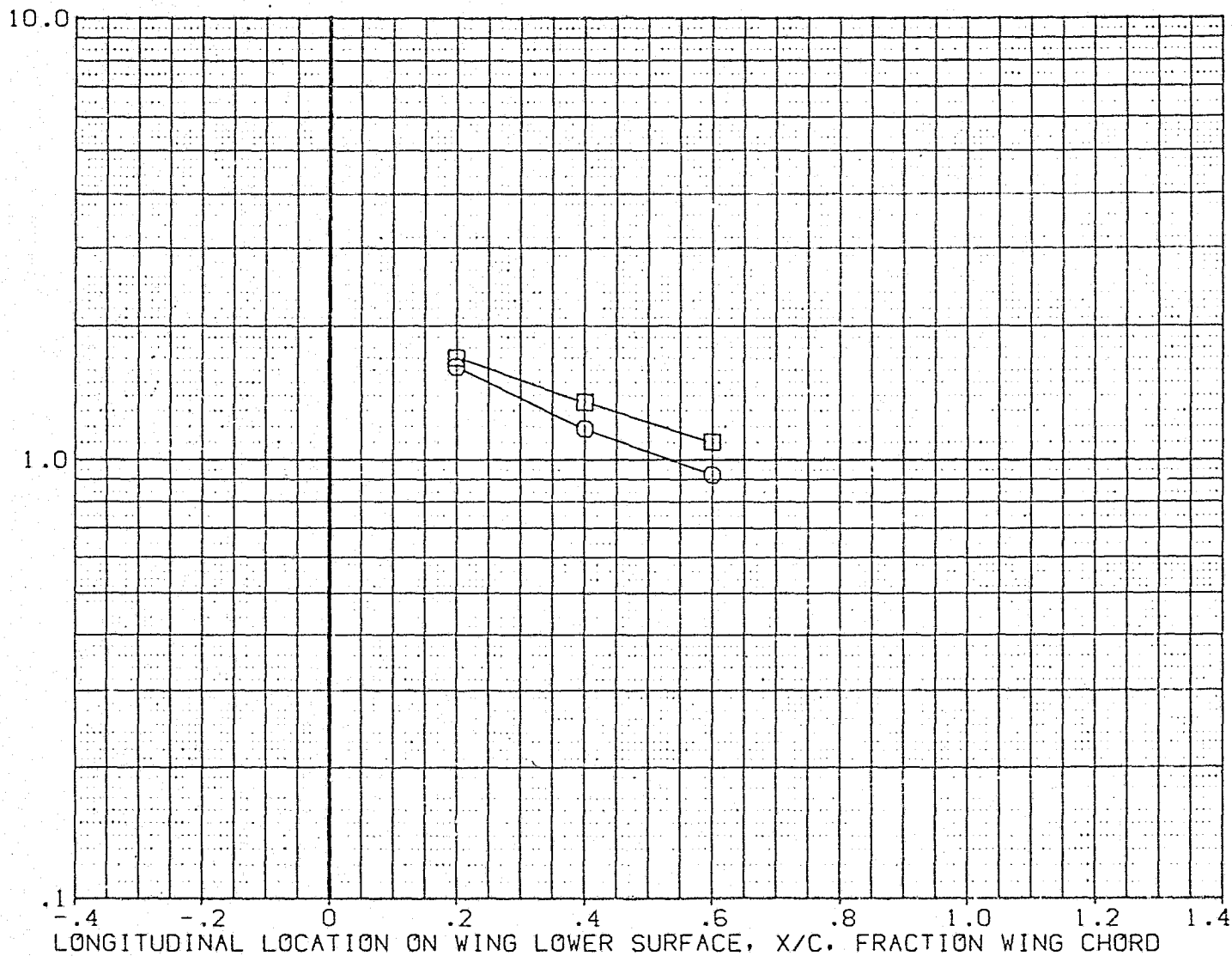




FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.987 HAW/HT = .850 2Y/B = .800

PAGE 123

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(ROSW06) 	OH45 B22C7W111M4V7F5 WING LOWER SURFACE
(ROSW08) 	OH45 B22C7W111M4V7F5 WING LOWER SURFACE

ALPHA	BETA	MACH
30.000	.000	6.000
30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

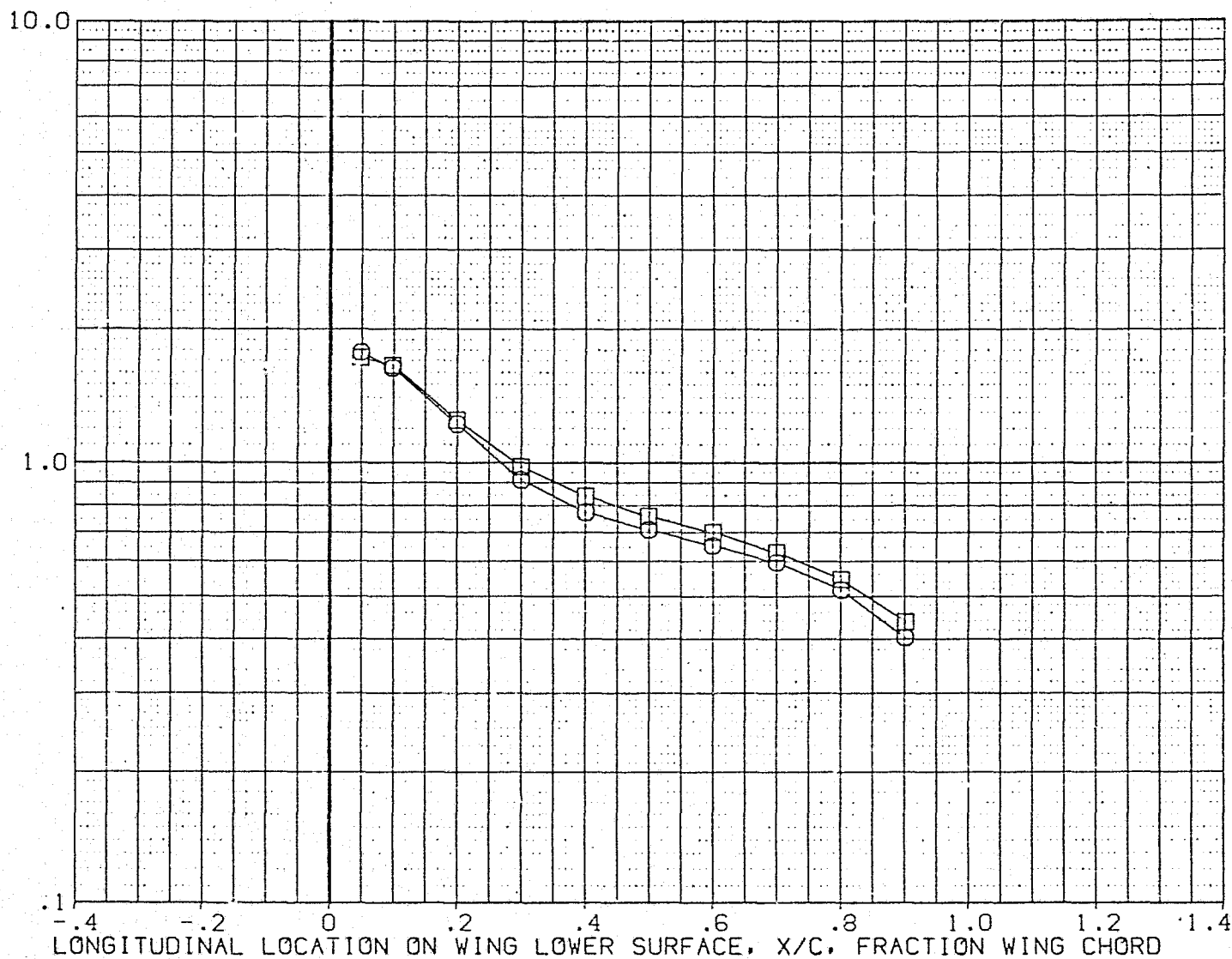


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.987 HAW/HT = .900 2Y/B = .400

PAGE 124

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SW06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(R0SW08)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

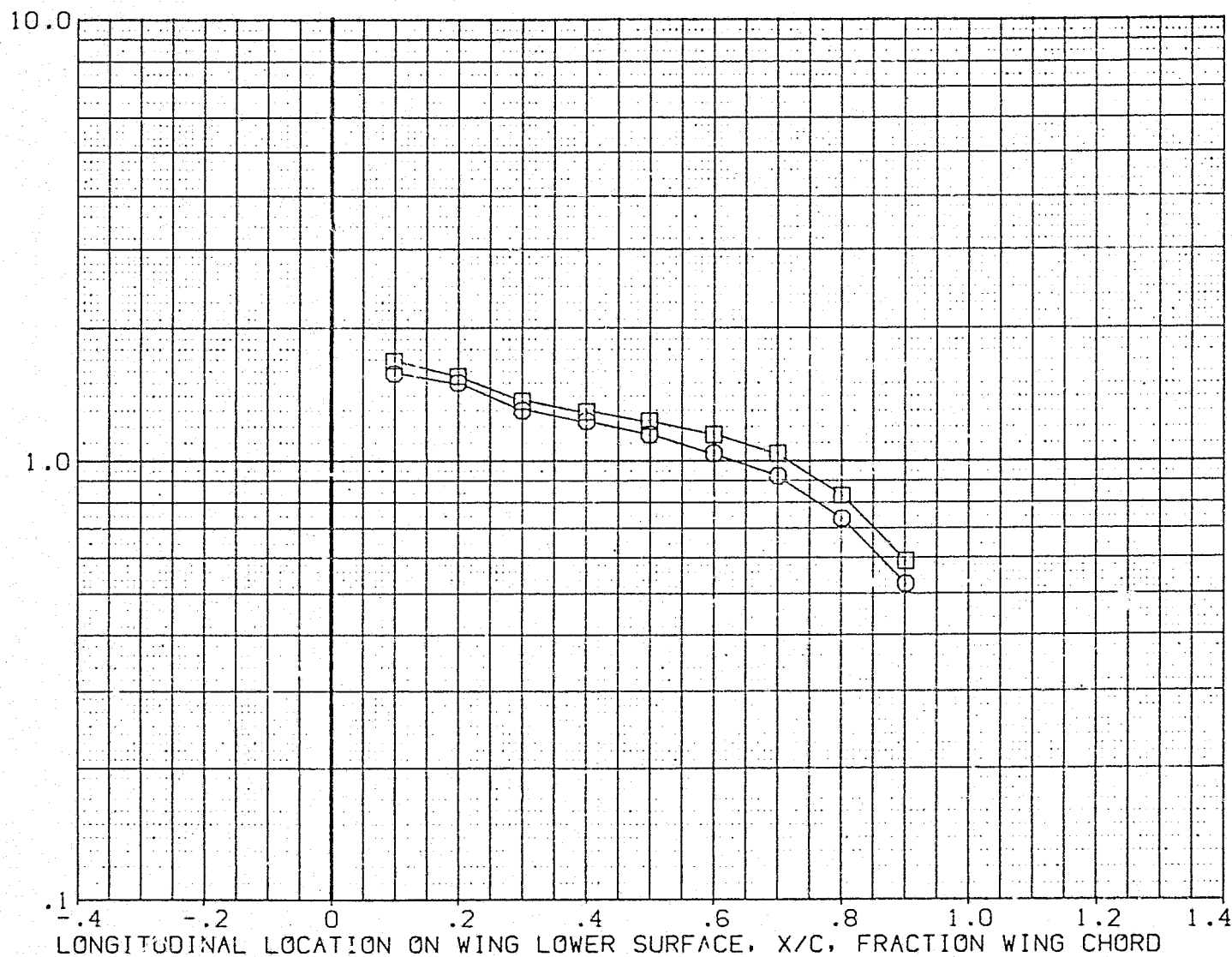


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.987 HAW/HT = .900 2Y/B = .600

PAGE 125

DATA SET SYMBOL	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R05W06)	□	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(R05W08)	○	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

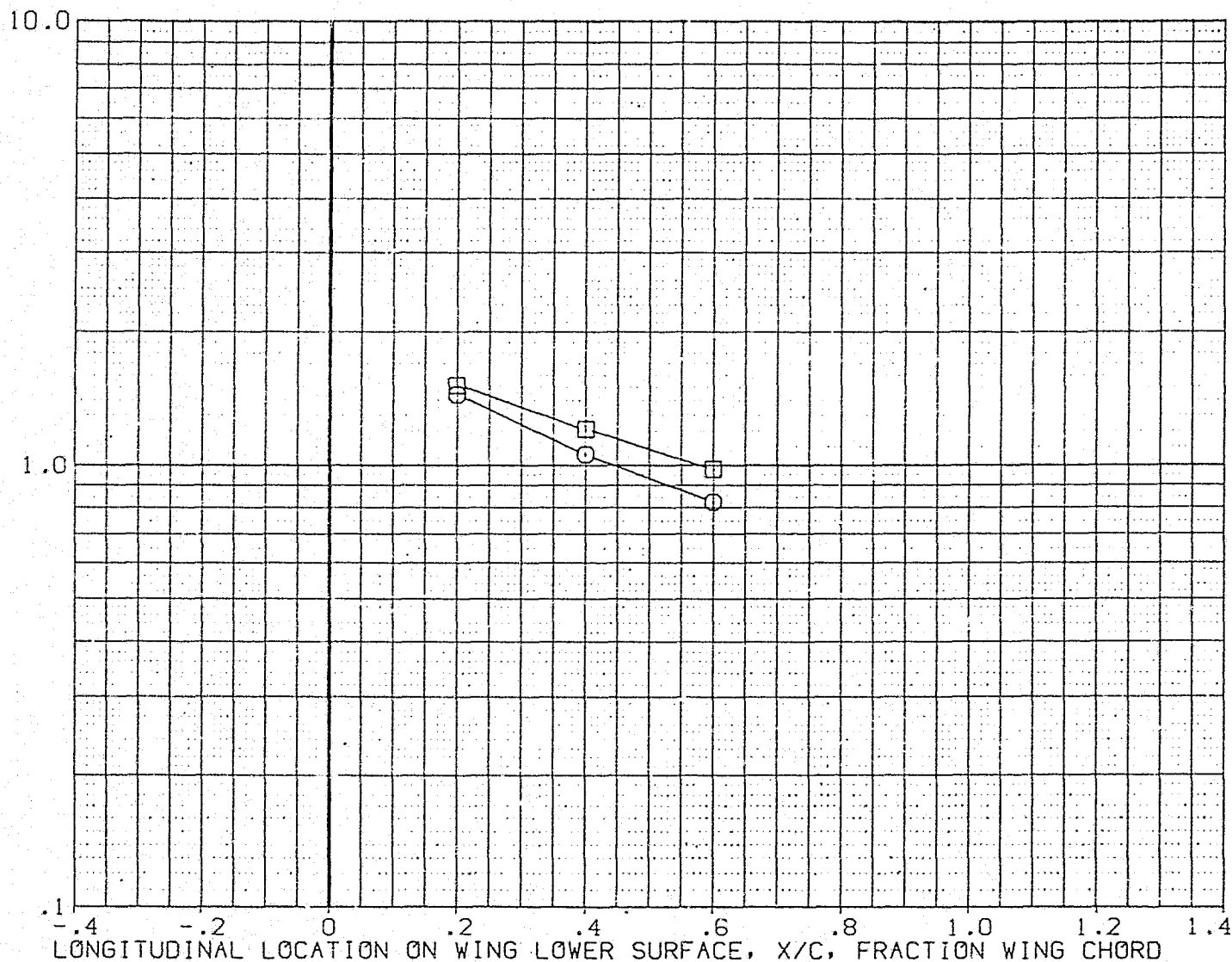




FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.987 HAW/HT = .900 2Y/B = .800

PAGE 126

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(RQSW06)  0H45 B22C7W111M4V7F5 WING LOWER SURFACE
(RQSW08)  0H45 B22C7W111M4V7F5 WING LOWER SURFACE

ALPHA	BETA	MACH
30.000	.000	6.000
30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

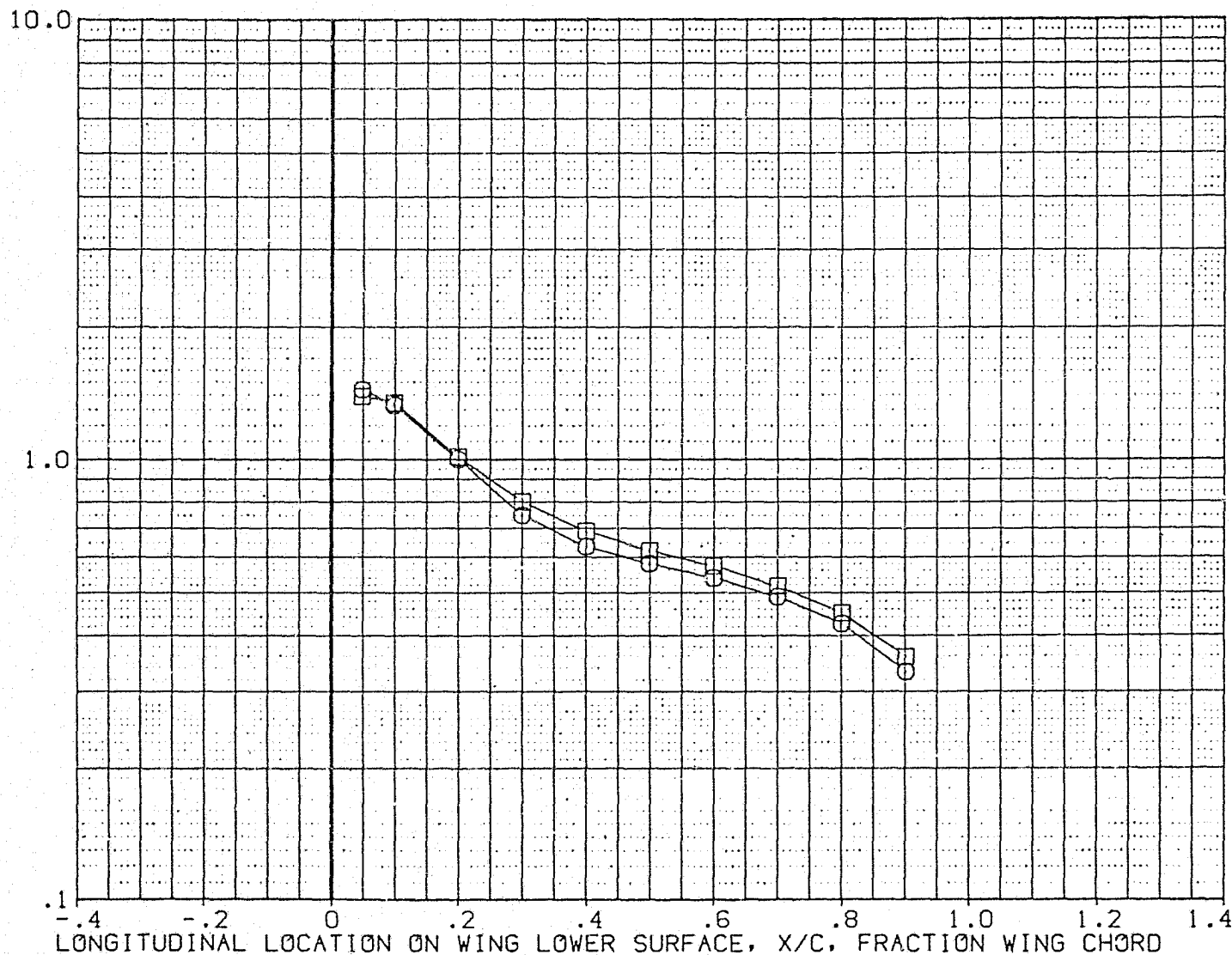


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.987 HAW/HT= 1.000 2Y/B = .400

PAGE 127

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSW06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(RQSW08)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

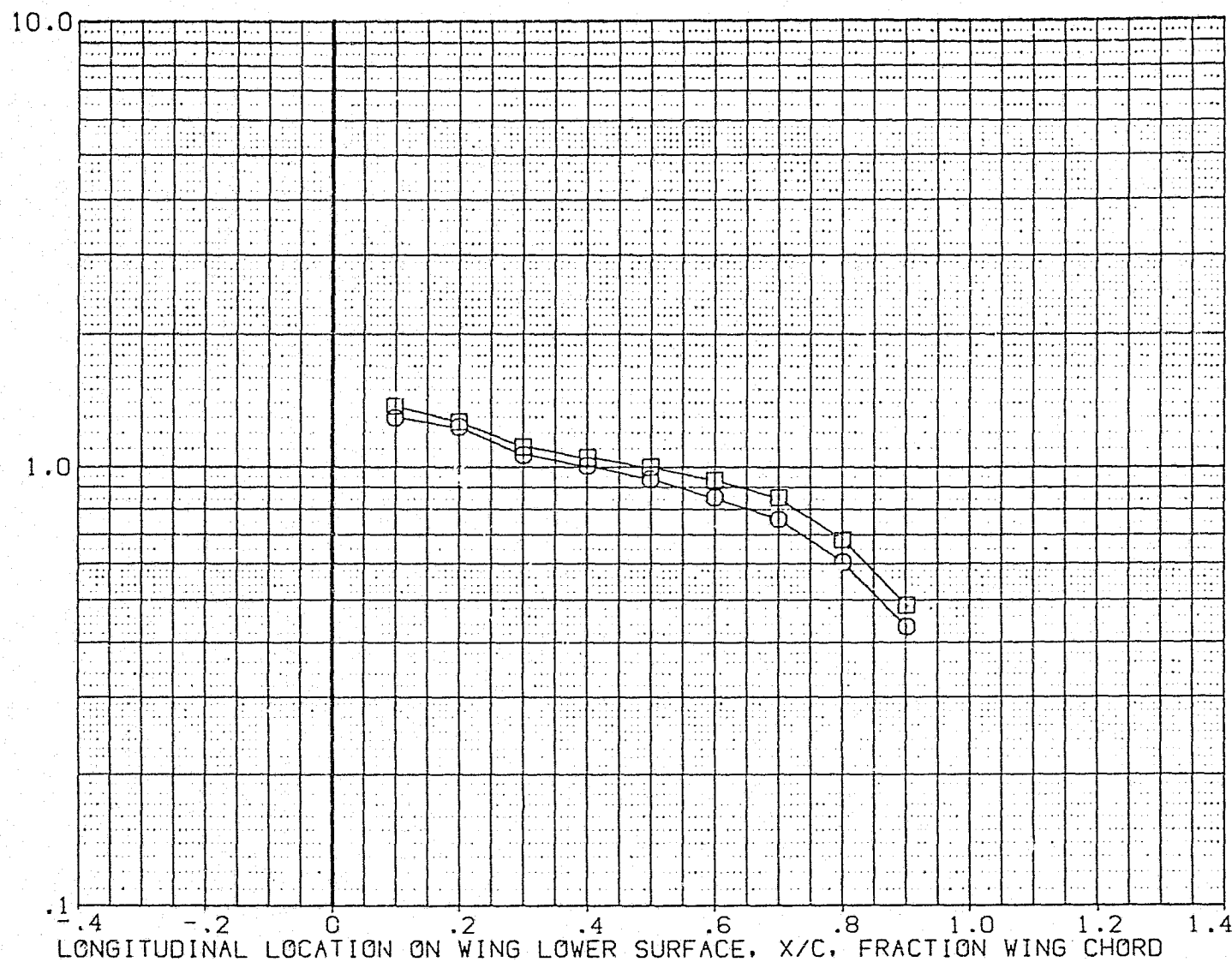


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.987 HAW/HT = 1.000 2Y/B = .600

PAGE 128

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSW06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(RQSW08)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	6.000

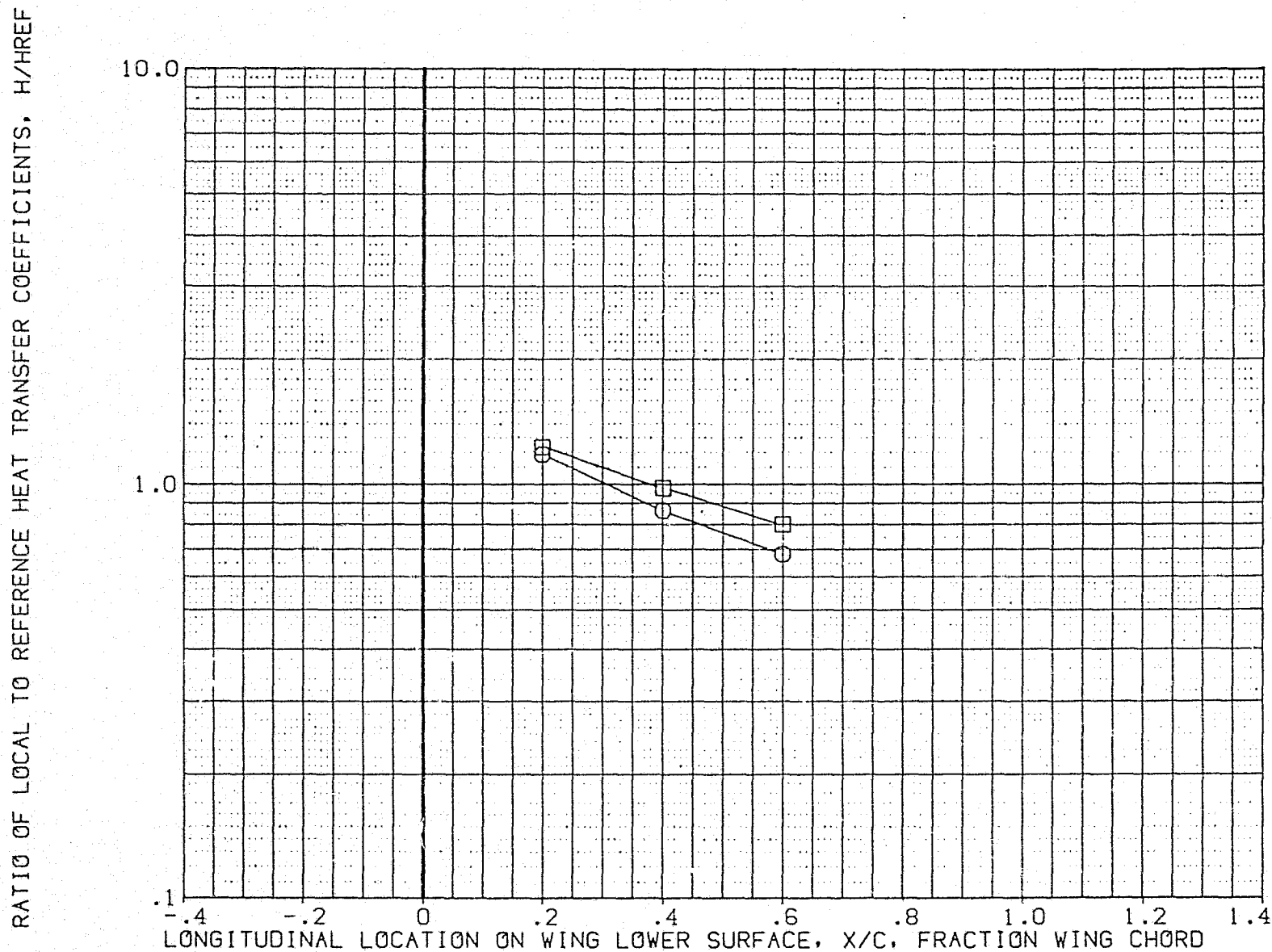


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 2.987 HAW/HT = 1.000 2Y/B = .800

PAGE 129

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSW06)	QH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(RQSW08)	CH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

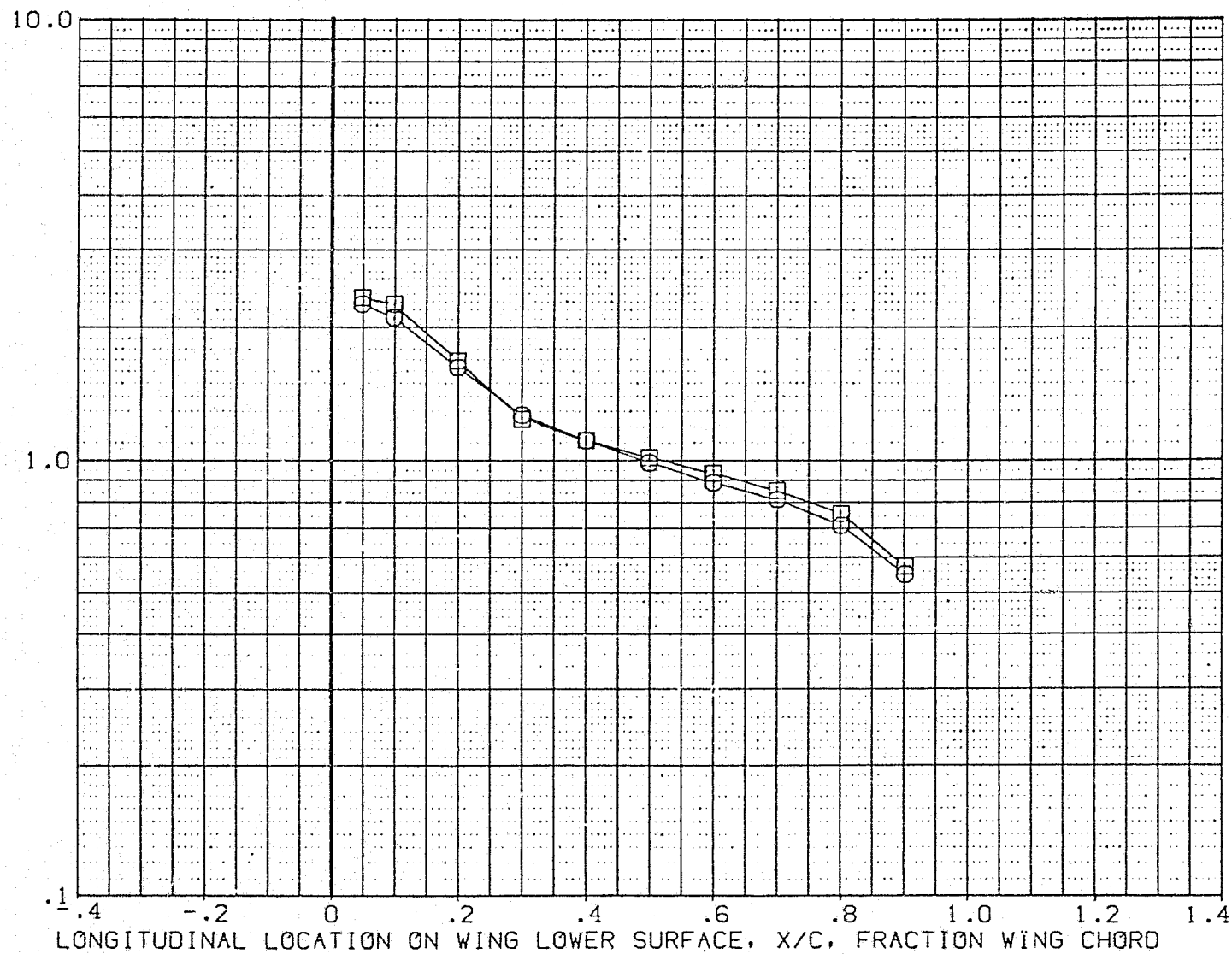


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.313 HAW/HT = .850 2Y/B = .400

PAGE 130

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSW06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(RQSW08)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

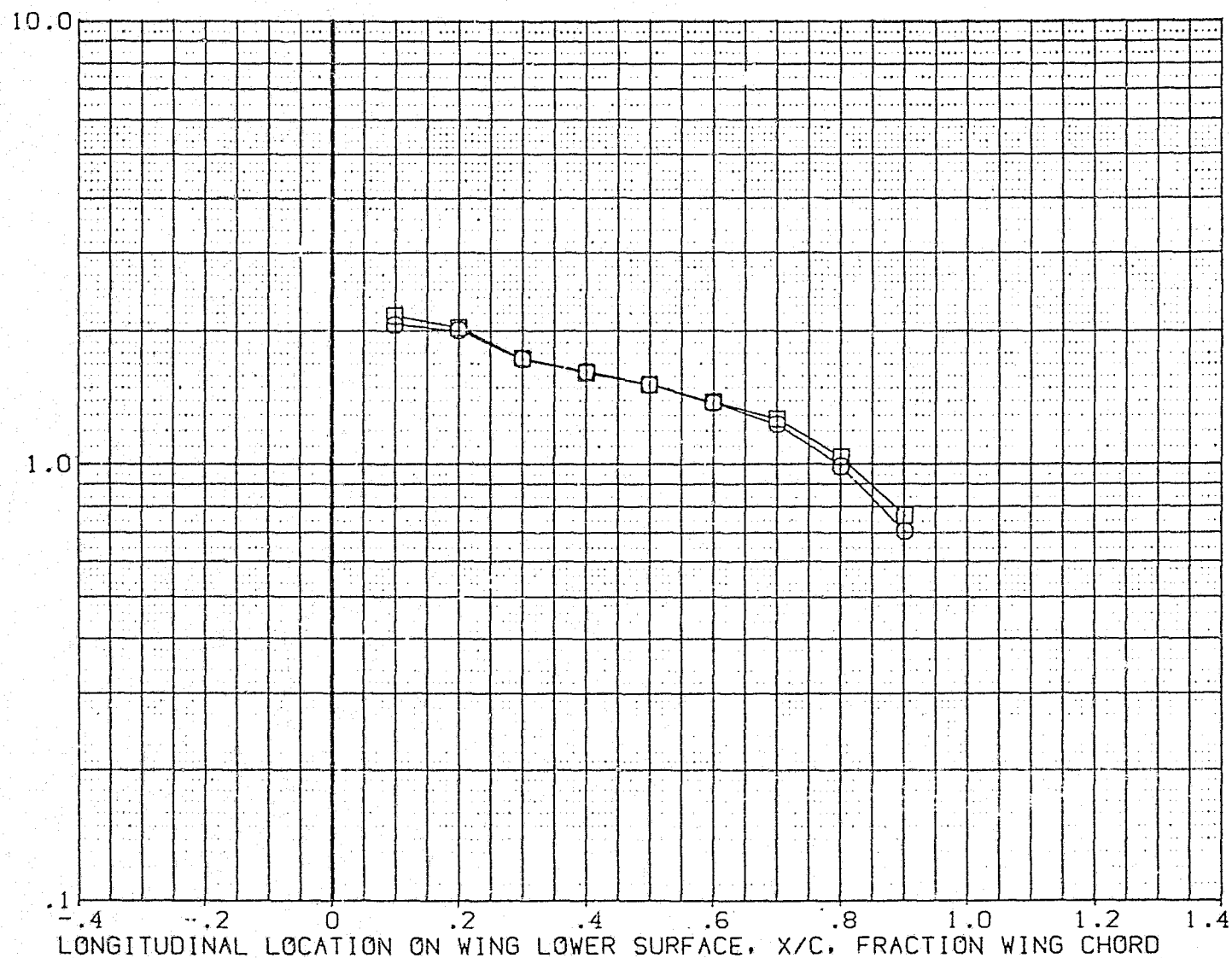


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.313 HA/H_T = .850 2Y/B = .600

PAGE 131

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(R05W06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE
(R05W08)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE

ALPHA	BETA	MACH
30.000	.000	6.000
30.000	1.000	6.000

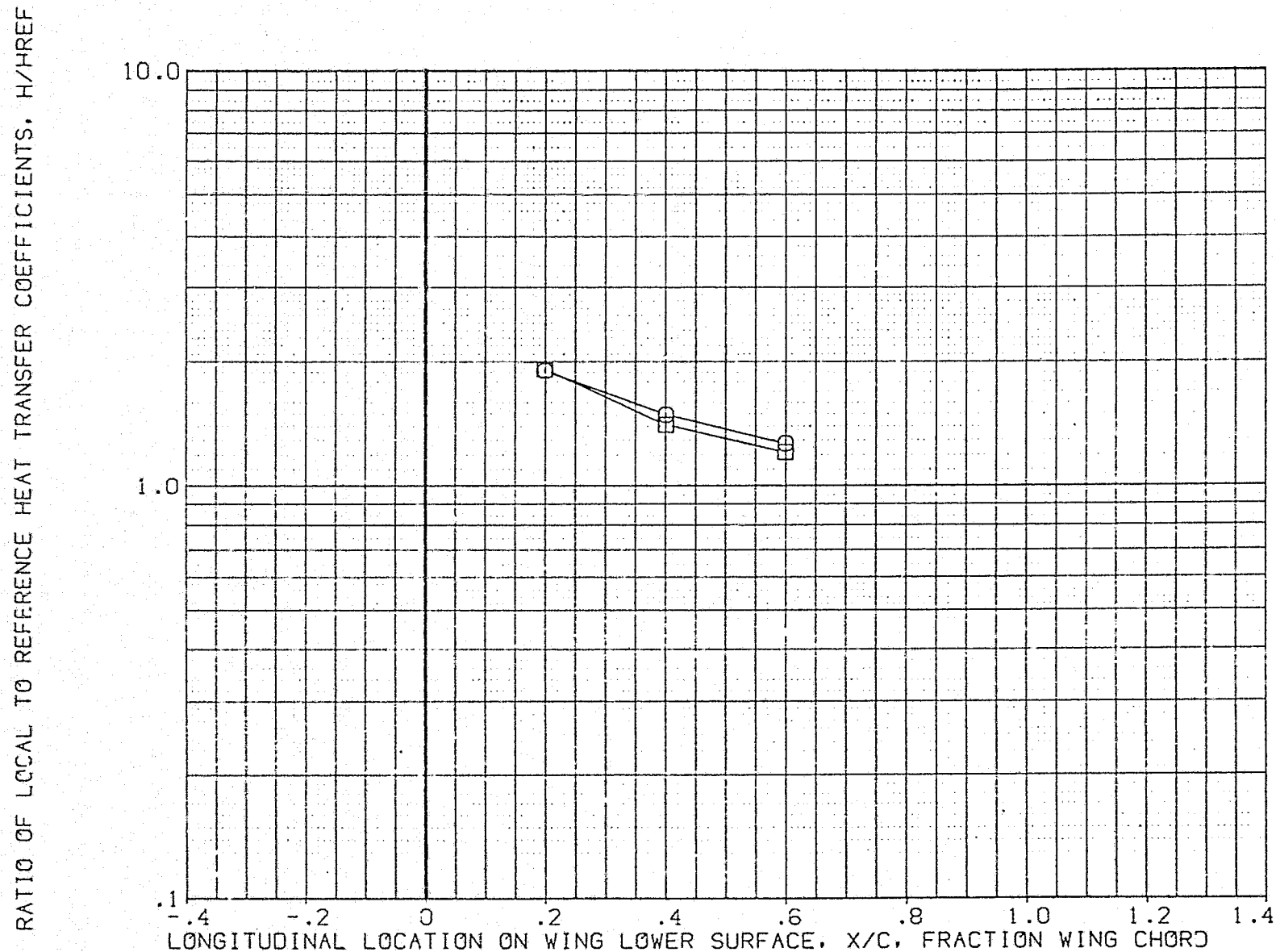


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.313 HAW/HT = .850 2Y/B = .800

PAGE 132

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(ROS006)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(ROS008)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

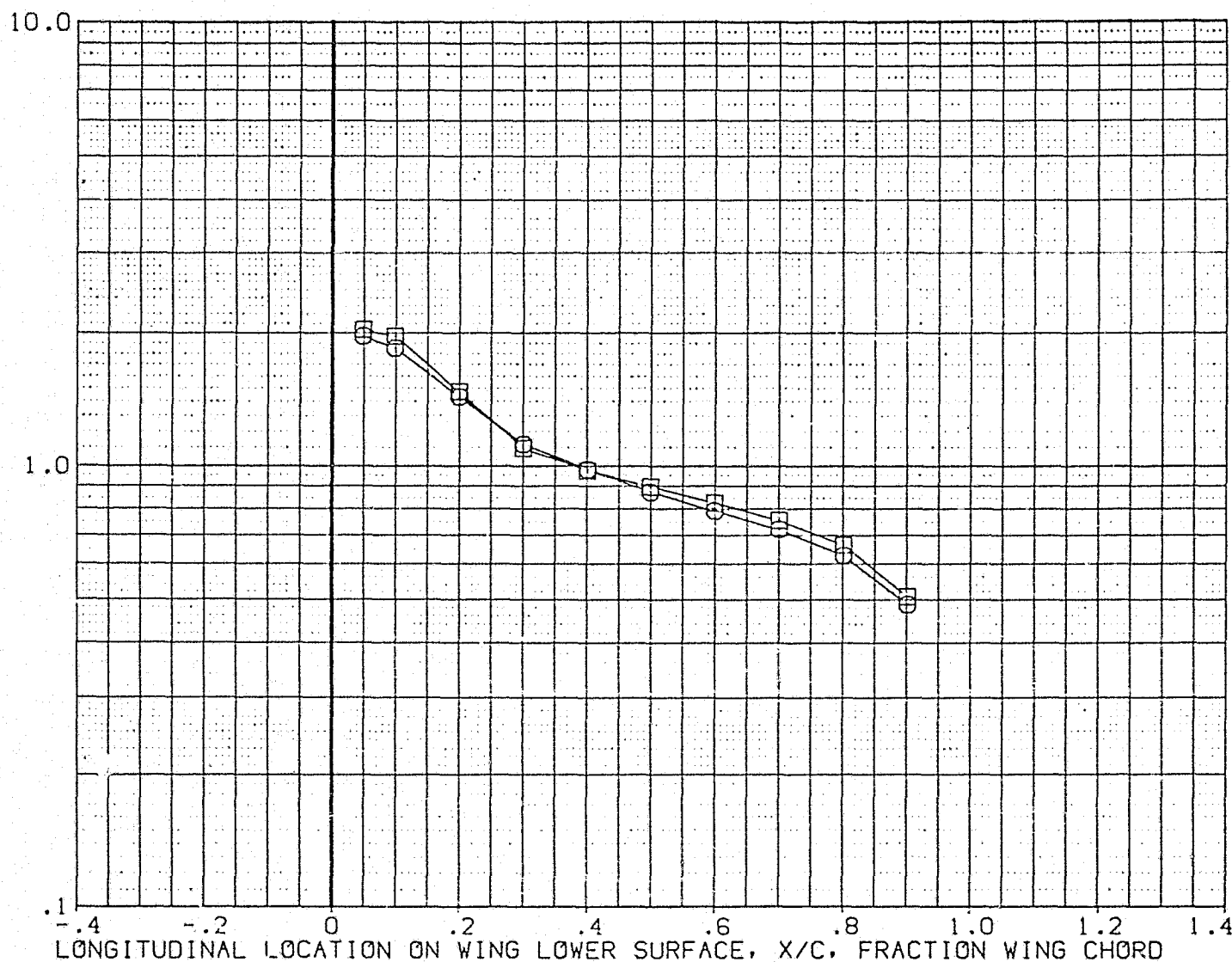


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.313 HAW/HT = .900 2Y/B = .400

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}

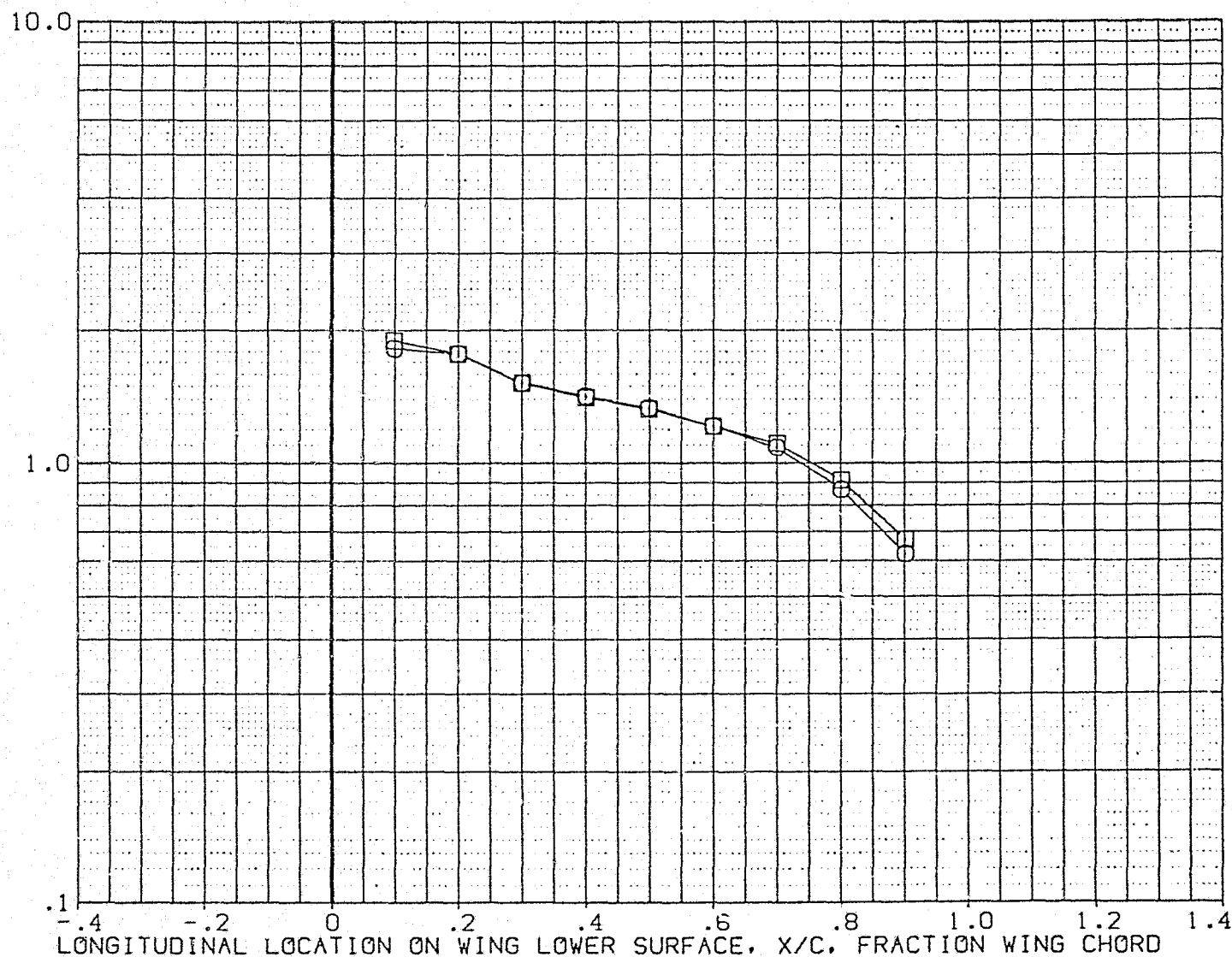


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.313 HAW/HT = .900 2Y/B = .600

PAGE 134

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SW06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(R0SW08)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	5.000

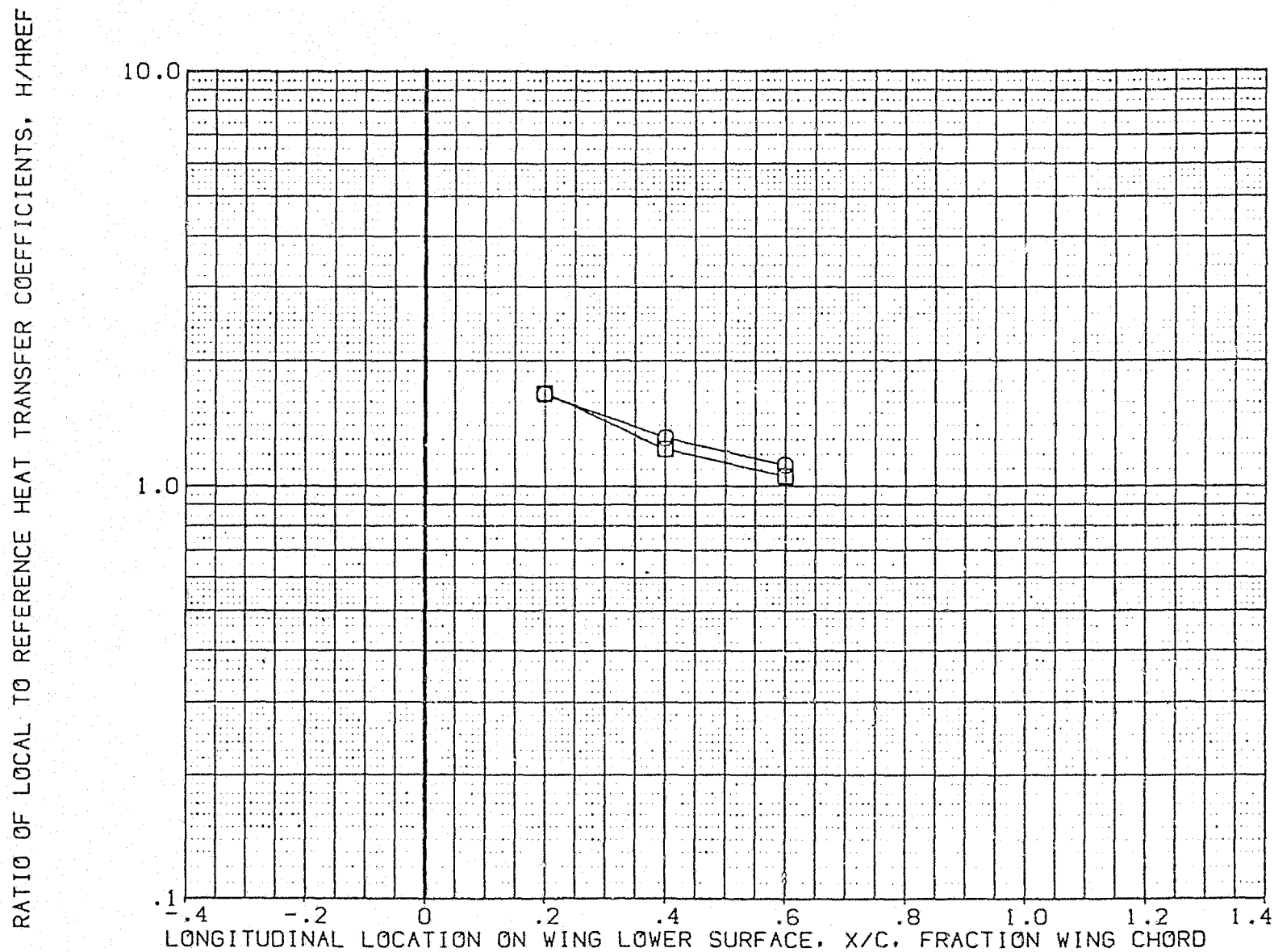


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.313 HAW/HT = .900 2Y/B = .800

PAGE 135

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSW06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(RQSW08)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	6.000

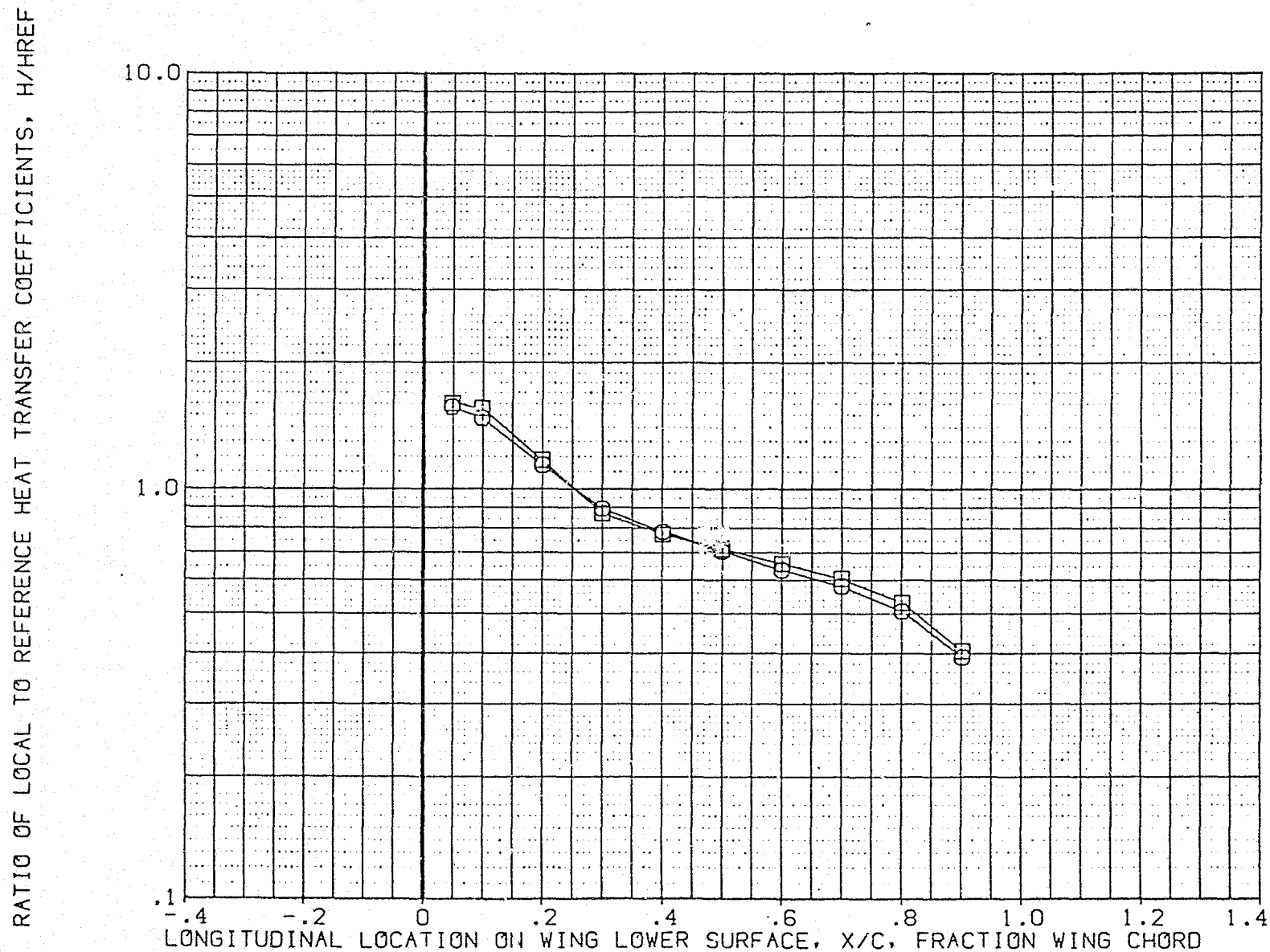


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

$RN/L = 5.313$ $HAW/HT = 1.000$ $2Y/B = .400$

PAGE 136

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(R0SW06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(R0SW08)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	6.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF}

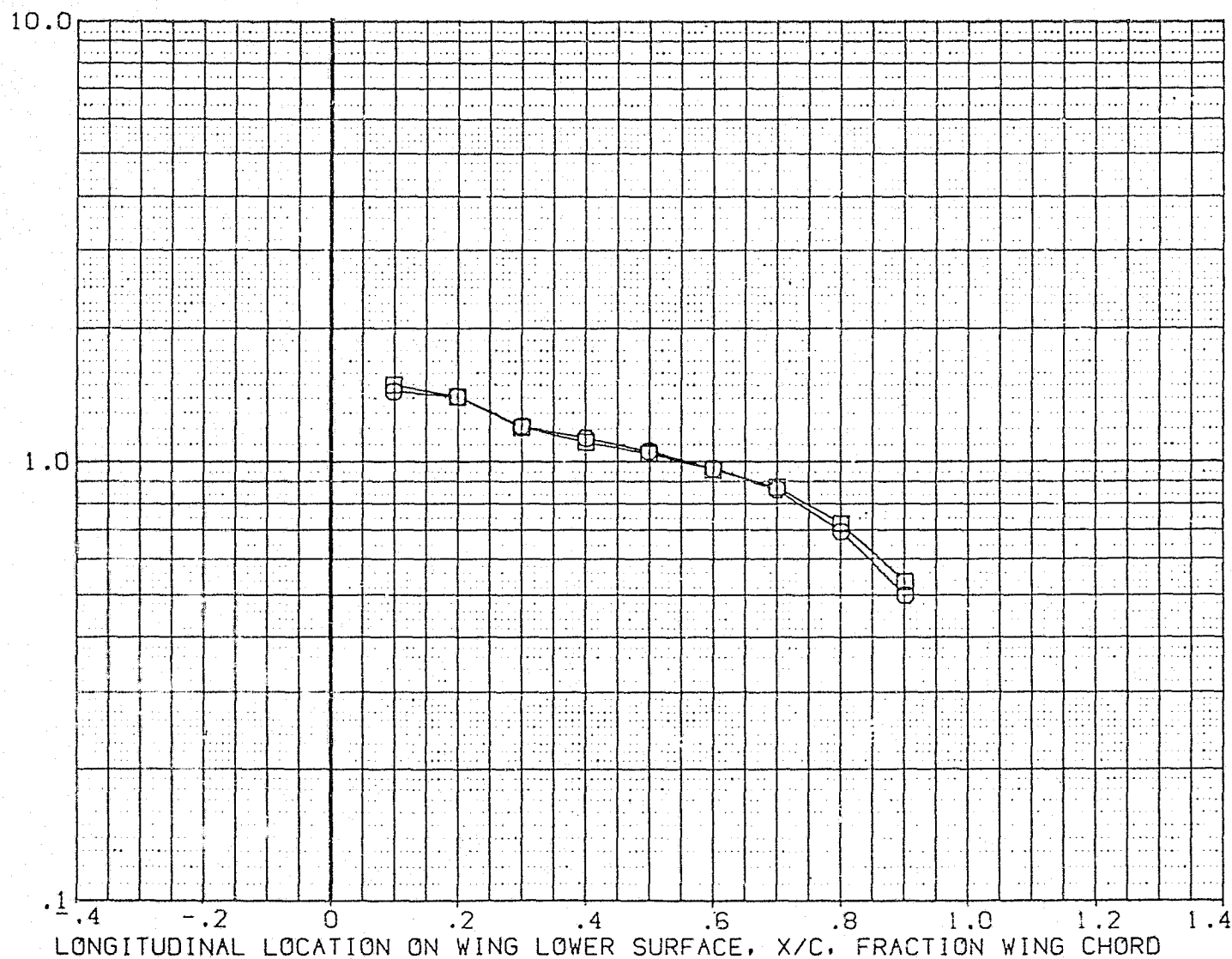


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.313 HAW/HT = 1.000 2Y/B = .600

PAGE 137

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	BETA	MACH
(RQSW06)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	.000	6.000
(RQSW08)	OH45 B22C7W111M4V7F5 WING LOWER SURFACE	30.000	1.000	6.000

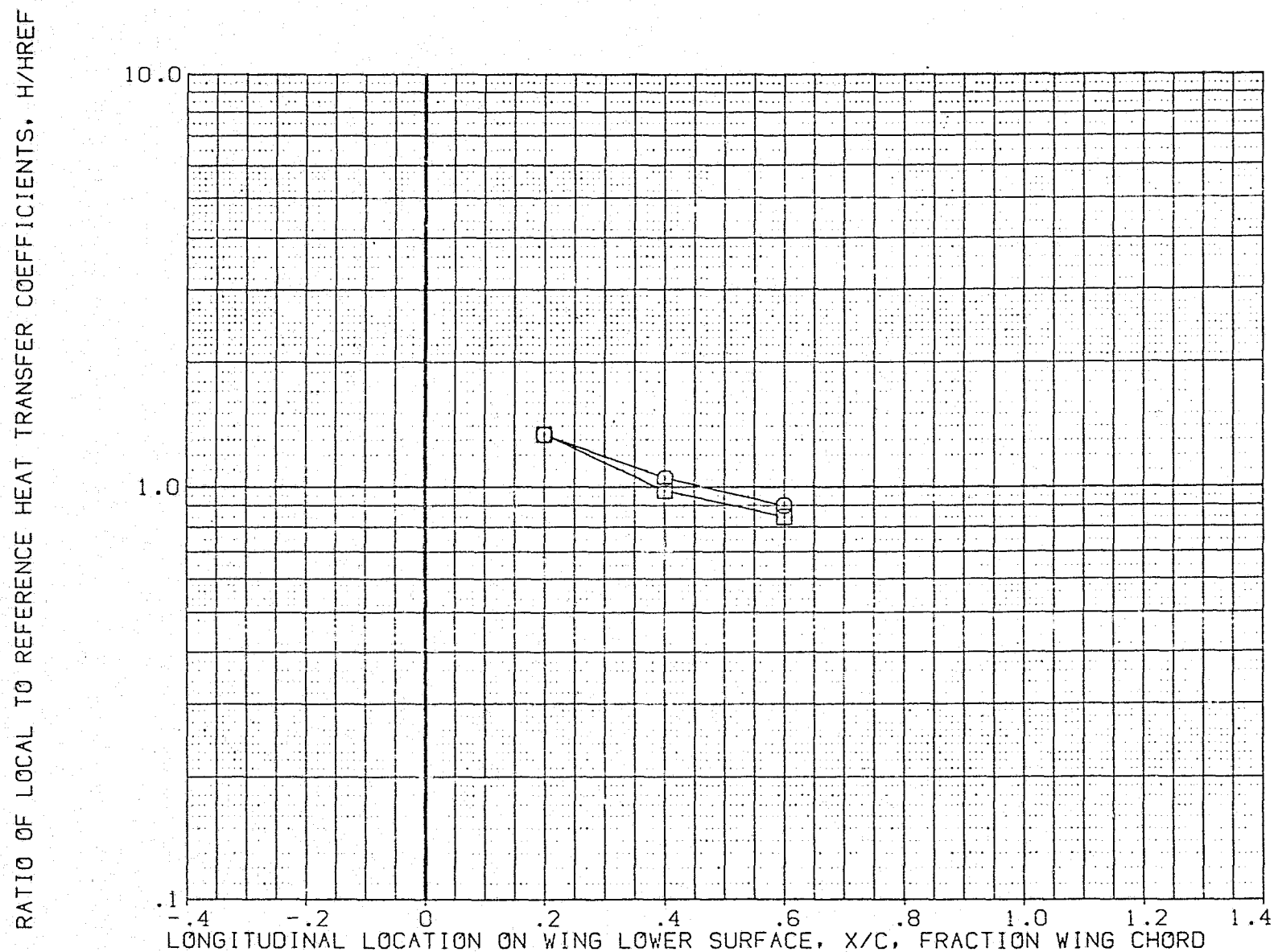


FIG 14 WING LOWER SURFACE DISTRIBUTION VARIATION WITH ANGLE OF SIDESLIP

RN/L = 5.313 HAW/HT = 1.000 2Y/B = .800

PAGE 138

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW06)

SYMBOL

RN/L

2Y/B

HAW/HT

PARAMETRIC VALUES

□

2.987

.400

.850

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

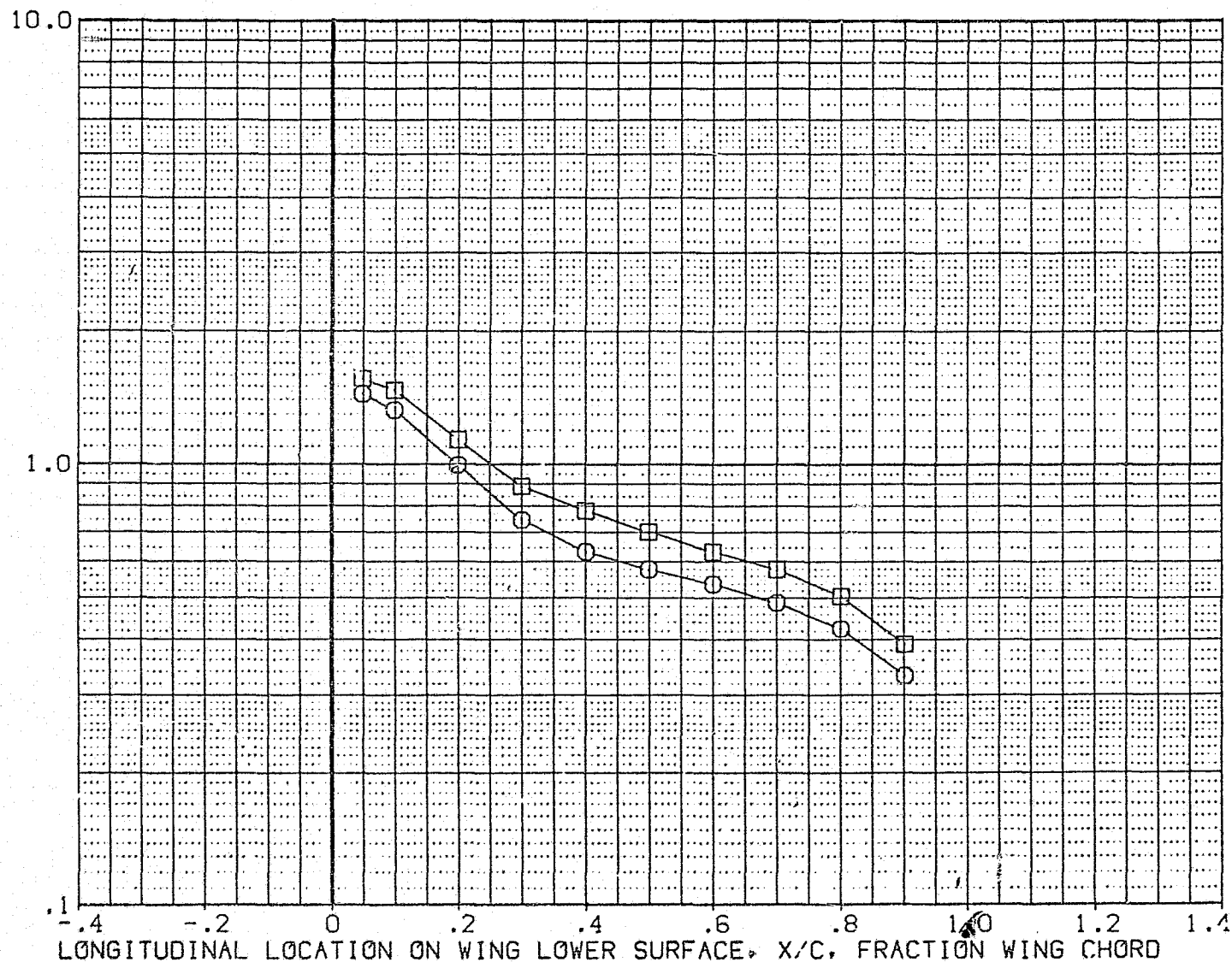


FIG 15 WING LOWER SURFACE DISTRIBUTION VARIATION WITH REYNOLDS NUMBER

OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW06)

SYMBOL

RN/L

2Y/B

HAW/HT

PARAMETRIC VALUES

□

2.987
5.313

.600

.850

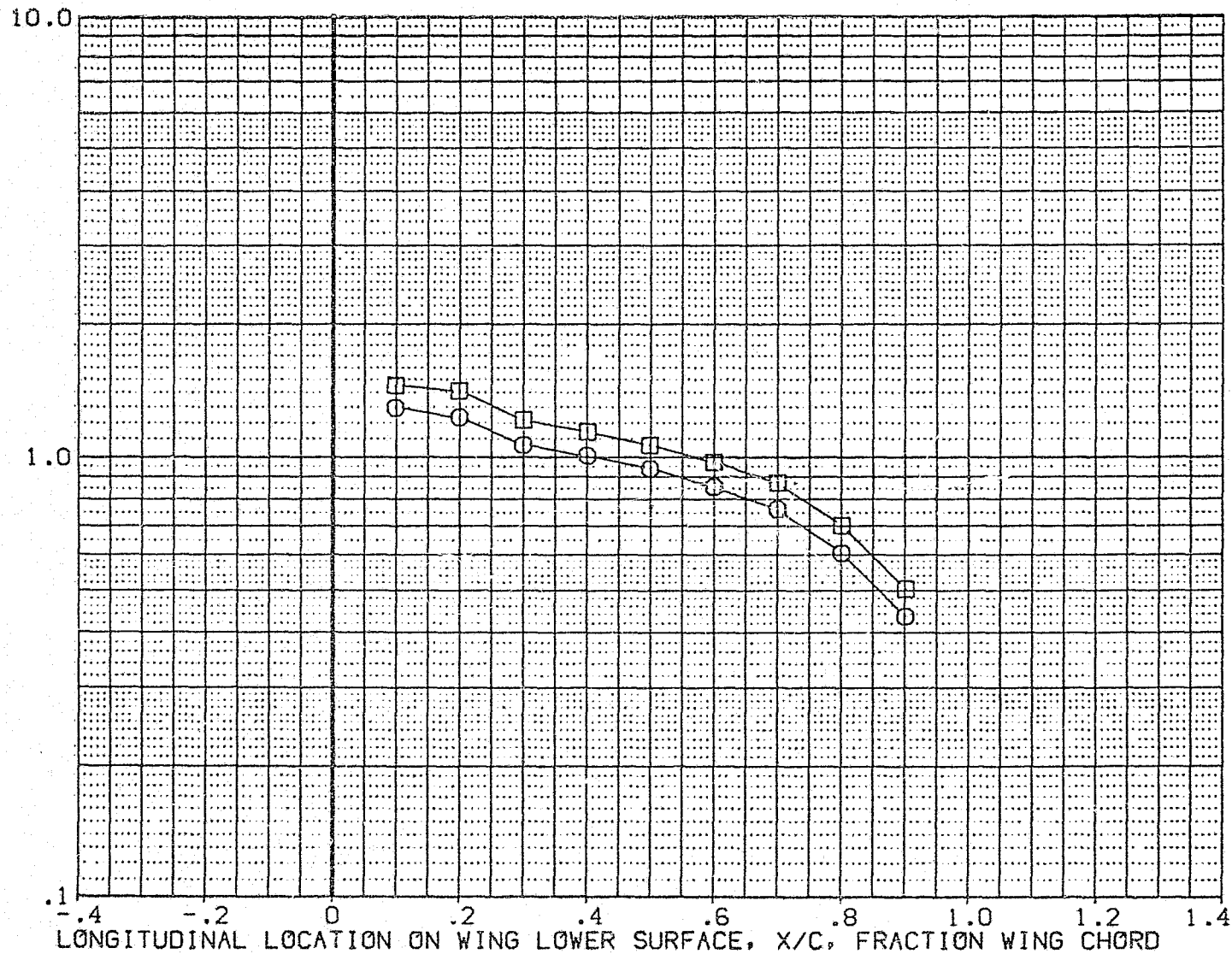
ALPHA
MACH
PHI30.000
6.000
.000BETA
ALPHAS
PHIS
.000
30.000
.000RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, h/h_{REF} 

FIG 15 WING LOWER SURFACE DISTRIBUTION VARIATION WITH REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW06)

SYMBOL

RN/L

2Y/B

HAW/HT

PARAMETRIC VALUES

○
□2.987
5.313

.800

.850

ALPHA

30.000

BETA

.000

MACH

6.000

ALPHAS

30.000

PHI

.000

PHIS

.000

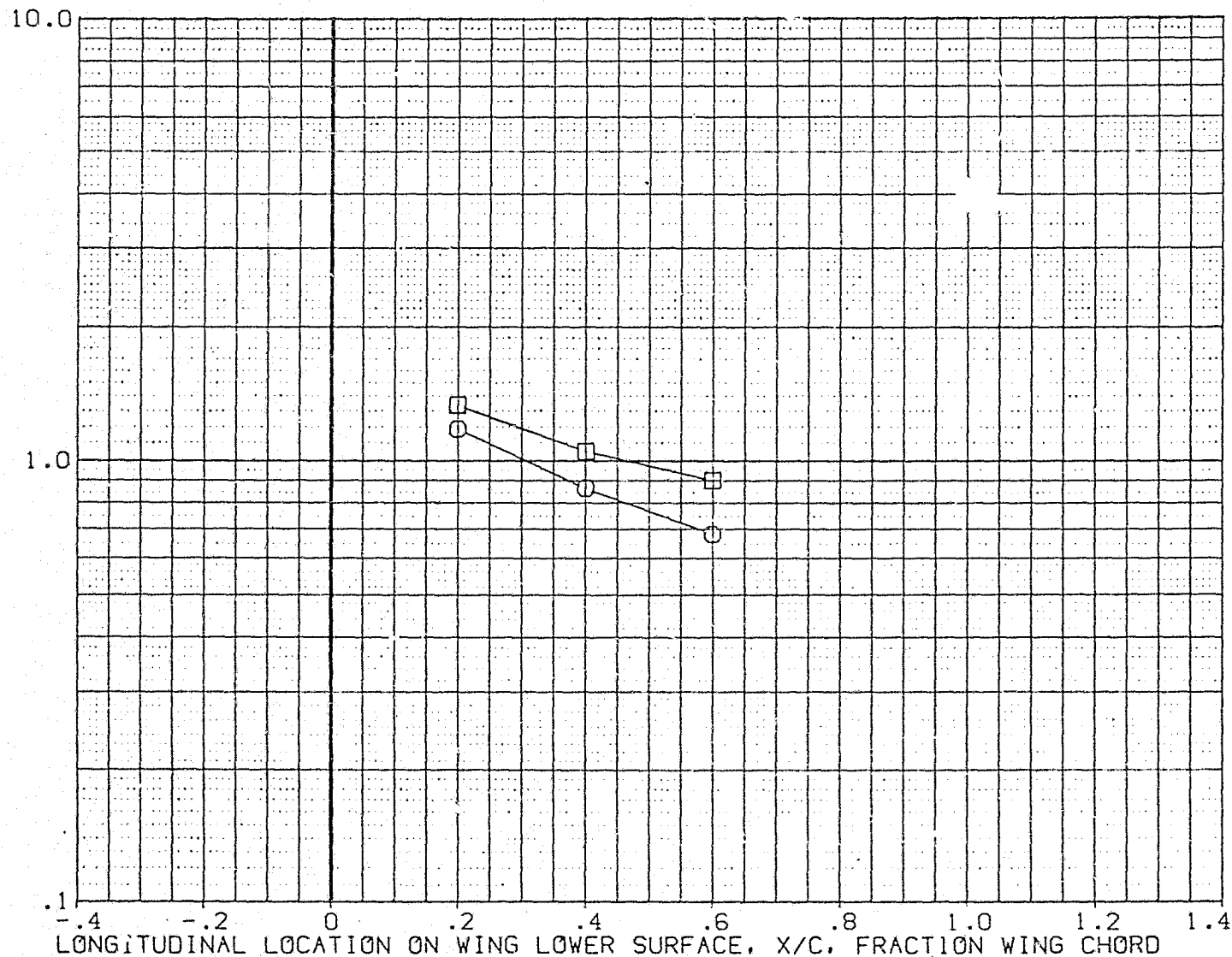
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 15 WING LOWER SURFACE DISTRIBUTION VARIATION WITH REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW08)

SYMBOL

RN/L

2Y/B

HAW/HT

ALPHA

PARAMETRIC VALUES

MACH

30.000

BETA

1.000

PHI

6.000

ALPHAS

30.000

-2.000

PHIS

.000

 3.121
5.244

.400

.850

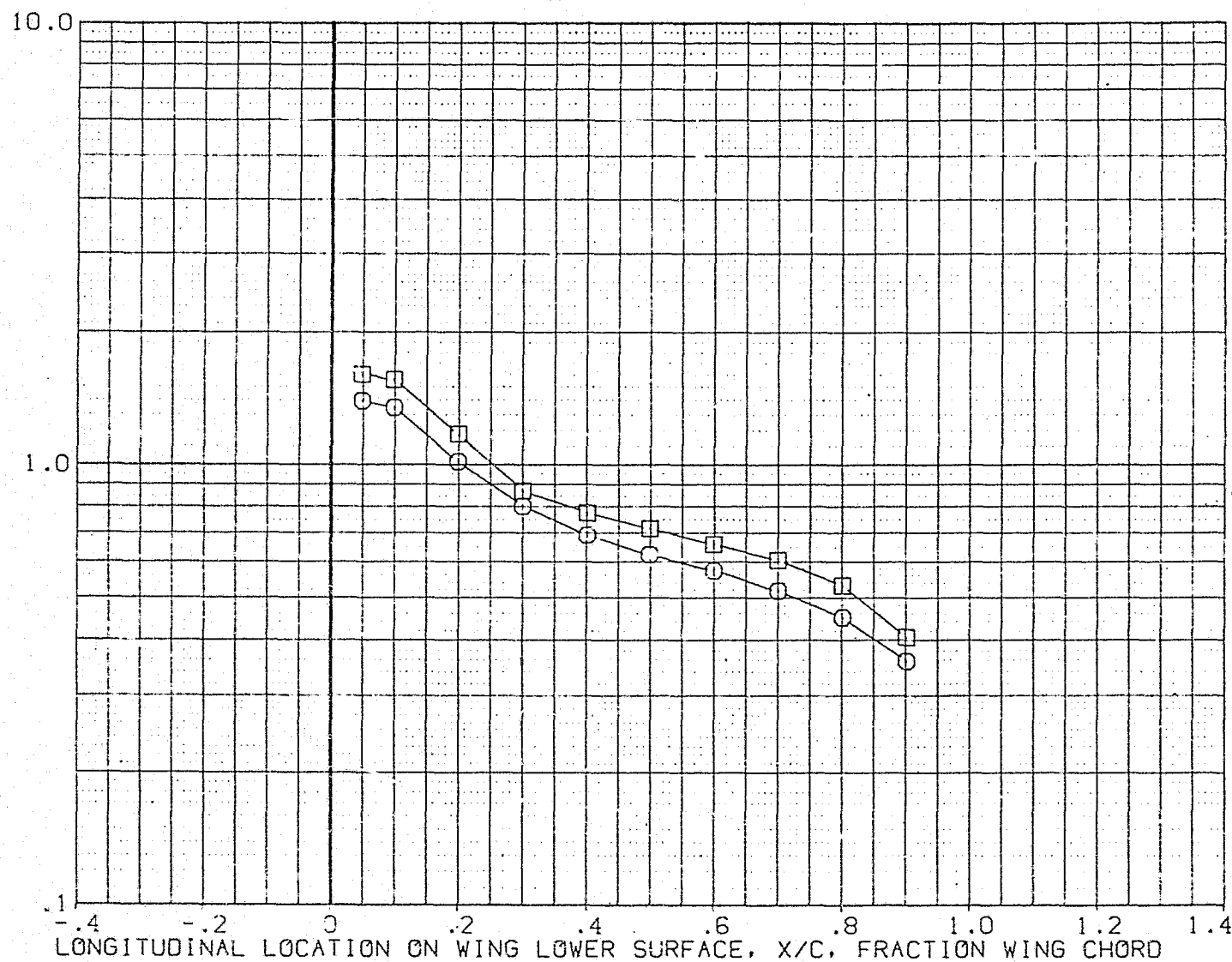
 RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF}


FIG 15 WING LOWER SURFACE DISTRIBUTION VARIATION WITH REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW08)

SYMBOL

RN/L

2Y/B

HAW/HT

○
□

3.121

.600

.850

5.244

ALPHA

PARAMETRIC VALUES

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

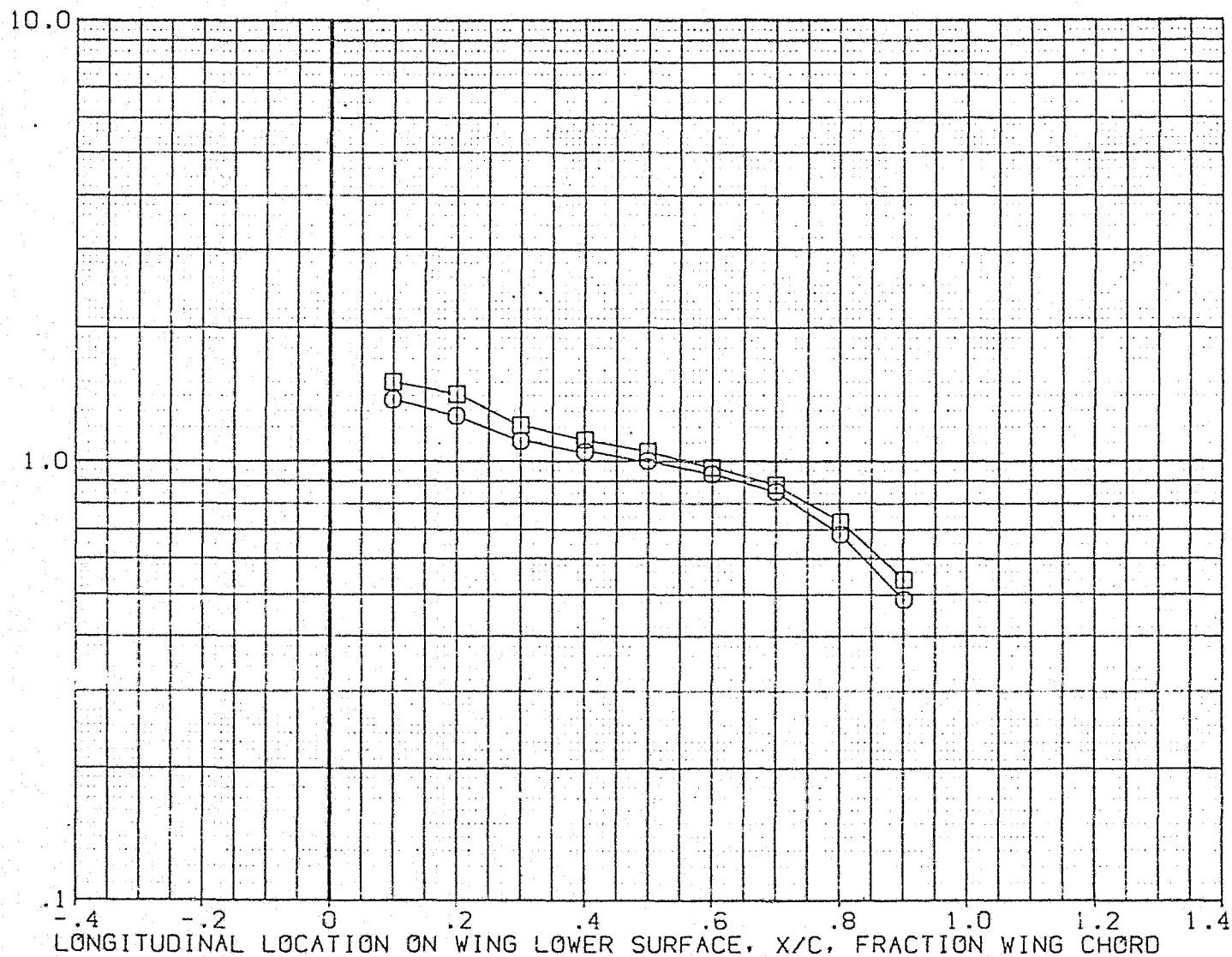
RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/H_{REF} 

FIG 15 WING LOWER SURFACE DISTRIBUTION VARIATION WITH REYNOLDS NUMBER

0H45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW08)

SYMBOL

RN/L

2Y/B

HAW/HT

PARAMETRIC VALUES

○
□3.121
5.244

.800

.850

ALPHA

30.000

BETA

1.000

MACH

6.000

ALPHAS

30.000

PHI

-2.000

PHIS

.000

RATIO OF LOCAL TO REFERENCE HEAT TRANSFER COEFFICIENTS, H/HREF

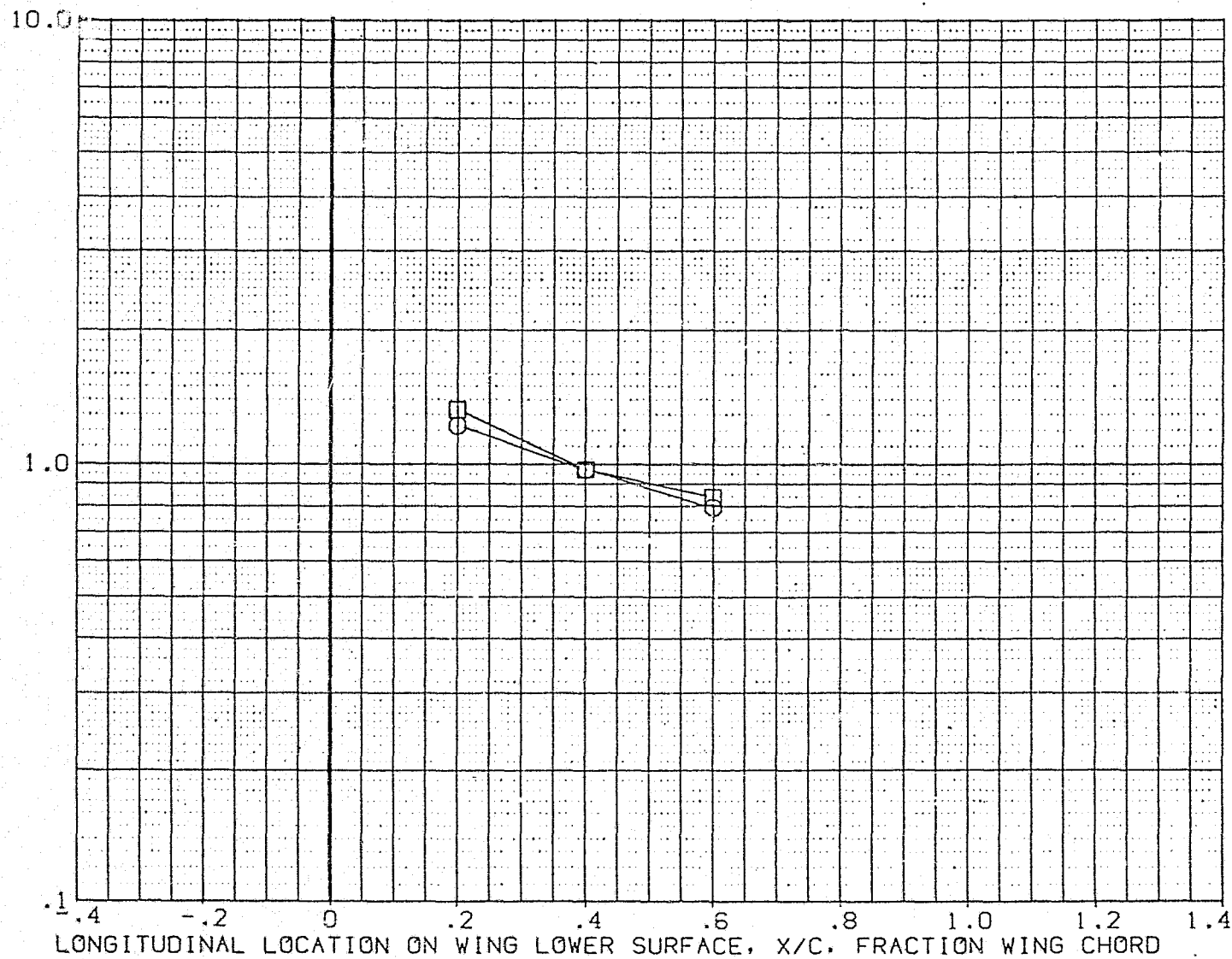


FIG 15 WING LOWER SURFACE DISTRIBUTION VARIATION WITH REYNOLDS NUMBER

APPENDIX A

TABULATED SOURCE DATA

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OH45 HEATING RATE - COLLATION

PAGE 1

OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE

(RQS801)

BOTTOM OF FUSELAGE

PARAMETRIC DATA

ALPHA = 25.00 BETA = .0000 MACH = 6.000 ALPHAS = 25.00
PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
125	6.150	2.956	25.00	.0000	3065.	1289.	1709.	1.825

TEST DATA

RUN NUMBER	Y(BP)	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
125	.00000	.25000-01	1.0000	2.714	3.352	3.798	.3635-02	.3867-02	6.686	599.8	139.8
125	.00000	.50000-01	2.0000	1.753	2.149	2.422	.3619-02	.6345-02	4.445	576.8	116.8
125	.00000	.75000-01	3.0000	1.509	1.846	2.078	.3614-02	.5455-02	3.853	571.1	111.1
125	.00000	.10000+00	4.0000	1.305	1.594	1.793	.3612-02	.4714-02	3.349	567.1	107.1
125	.00000	.12500	5.0000	1.142	1.394	1.567	.3610-02	.4123-02	2.939	564.6	104.6
125	.00000	.15000	6.0000	.9914	1.209	1.359	.3608-02	.3577-02	2.559	561.9	101.9
125	.00000	.17500	7.0000	.9160	1.116	1.254	.3606-02	.3303-02	2.371	559.6	99.59
125	.00000	.20000	8.0000	.9713	1.062	1.192	.3605-02	.3141-02	2.257	558.9	98.92
125	.00000	.25000	9.0000	.8024	.9773	1.097	.3604-02	.2992-02	2.083	556.9	96.93
125	.00000	.30000	10.000	.7194	.8757	.9824	.3603-02	.2692-02	1.872	555.3	95.31
125	.00000	.35000	11.000	.7147	.8700	.9760	.3603-02	.2575-02	1.859	555.4	95.36
125	.00000	.40000	12.000	.6775	.8247	.9253	.3603-02	.2441-02	1.762	555.4	95.36
125	.00000	.45000	13.000	.6507	.7920	.8885	.3602-02	.2344-02	1.694	554.7	94.65
125	.00000	.50000	14.000	.2344-07	.2653-07	.3200-07	.1000+06	.2344-02	1.694	554.7	94.65
125	.00000	.55000	15.000	.6059	.7372	.8267	.3601-02	.2182-02	1.580	553.3	93.27
125	.00000	.60000	16.000	.5976	.7147	.8014	.3601-02	.2116-02	1.534	552.7	92.73
125	.00000	.65000	17.000	.5796	.7049	.7903	.3601-02	.2087-02	1.513	552.3	92.28
125	.00000	.70000	18.000	.5572	.6776	.7596	.3600-02	.2006-02	1.456	551.7	91.69
125	.00000	.75000	19.000	.5358	.6516	.7305	.3600-02	.1923-02	1.399	552.0	92.00
125	.00000	.80000	20.000	.5032	.6116	.6854	.3599-02	.1811-02	1.317	550.2	90.15
125	.00000	.85000	21.000	.4768	.5795	.6494	.3599-02	.1716-02	1.249	549.9	89.87
125	.00000	.90000	22.000	.4070	.4944	.5539	.3597-02	.1464-02	1.068	548.1	88.12
125	.00000	.95000	23.000	.3306	.4014	.4495	.3596-02	.1189-02	.8695	546.1	86.13
125	.00000	1.0000	24.000	.2707	.3295	.3678	.3595-02	.9730-03	.7124	545.0	84.95
125	.00000	1.0400	25.000	.2359	.2863	.3205	.3595-02	.8480-03	.6211	544.9	84.90
125	117.00	.35000	26.000	.7095	.8656	.9725	.3608-02	.2560-02	1.830	562.4	102.4

OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE

(RQSB01)

RUN NUMBER	Y(BP)	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
125	117.00	.40000	27.000	.7688	.9389	1.056	.3611-02	.2776-02	1.975	566.1	106.1
125	117.00	.50000	28.000	.8937	1.092	1.227	.3611-02	.3227-02	2.295	566.4	106.4
125	117.00	.60000	29.000	.7610	.9281	1.043	.3607-02	.2745-02	1.956	561.3	101.3
125	117.00	.70000	30.000	.6213	.7568	.8494	.3604-02	.2239-02	1.612	557.5	97.51
125	117.00	.80000	31.000	.5508	.6704	.7521	.3602-02	.1984-02	1.433	554.8	94.81
125	117.00	.90000	32.000	.1984-07	.2415-07	.2709-07	.1000+06	.1984-02	1.433	554.8	94.81
125	117.00	1.0000	33.000	.4144	.5034	.5640	.3598-02	.1491-02	1.087	548.6	88.62

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE

(RQSB03)

BOTTOM OF FUSELAGE

PARAMETRIC DATA

ALPHA = 35.00 BETA = .0000 MACH = 6.000 ALPHAS = 35.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
124	6.180	3.149	35.00	.0000	3025.	1264.	1740.	1.861

TEST DATA

RUN NUMBER	Y(BP)	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
124	.00000	.25000-01	1.0000	2.760	3.447	3.937	.3655-02	.1009-01	6.394	618.7	158.7
124	.00000	.50000-01	2.0000	2.014	2.491	2.827	.3637-02	.7324-02	4.828	593.4	133.4
124	.00000	.75000-01	3.0000	1.869	2.307	2.613	.3632-02	.6787-02	4.519	586.8	126.8
124	.00000	.10000+00	4.0000	1.656	2.040	2.308	.3628-02	.6007-02	4.030	581.8	121.8
124	.00000	.12500	5.0000	1.493	1.639	2.078	.3626-02	.5414-02	3.649	578.7	118.7
124	.00000	.15000	6.0000	1.323	1.639	1.851	.3623-02	.4829-02	3.272	575.0	115.0
124	.00000	.17500	7.0000	1.282	1.574	1.777	.3620-02	.4641-02	3.161	571.5	111.5
124	.00000	.20000	8.0000	1.223	1.504	1.697	.3619-02	.4434-02	3.026	570.2	110.2
124	.00000	.25000	9.0000	1.123	1.377	1.552	.3617-02	.4062-02	2.785	566.9	106.9
124	.00000	.30000	10.000	1.055	1.292	1.456	.3615-02	.3814-02	2.626	564.2	104.2
124	.00000	.35000	11.000	1.006	1.232	1.388	.3614-02	.3635-02	2.504	563.6	103.6
124	.00000	.40000	12.000	.9416	1.153	1.299	.3614-02	.3403-02	2.346	563.3	103.3
124	.00000	.45000	13.000	.9064	1.110	1.250	.3613-02	.3275-02	2.261	562.2	102.2
124	.00000	.50000	14.000	.3275-07	.4009-07	.4515-07	.1000+06	.3275-02	2.261	562.2	102.2
124	.00000	.55000	15.000	.8737	1.069	1.203	.3611-02	.3155-02	2.186	559.8	99.8
124	.00000	.60000	16.000	.8427	1.030	1.160	.3611-02	.3043-02	2.111	559.1	99.05
124	.00000	.65000	17.000	.8093	.9882	1.112	.3610-02	.2918-02	2.027	558.2	98.15
124	.00000	.70000	18.000	.7736	.9454	1.064	.3609-02	.2792-02	1.942	557.0	97.00
124	.00000	.75000	19.000	.7268	.8991	.9990	.3609-02	.2623-02	1.825	556.8	96.03
124	.00000	.80000	20.000	.6961	.8501	.9558	.3607-02	.2511-02	1.753	554.7	94.68
124	.00000	.85000	21.000	.6487	.7920	.8903	.3607-02	.2340-02	1.635	553.9	93.89
124	.00000	.90000	22.000	.5356	.6534	.7341	.3605-02	.1931-02	1.354	551.4	91.39
124	.00000	.95000	23.000	.4570	.5570	.6254	.3602-02	.1646-02	1.159	548.6	88.57
124	.00000	1.0000	24.000	.4079	.4969	.5578	.3601-02	.1469-02	1.037	547.0	87.01
124	.00000	1.0400	25.000	.3577	.4356	.4889	.3601-02	.1288-02	.9096	546.3	86.29
124	117.00	.35000	26.000	.8339	1.023	1.154	.3618-02	.3017-02	2.064	568.7	108.7

OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE

(RQSB03)

RUN NUMBER	Y(BP)	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
124	117.00	.40000	27.000	.8915	1.095	1.237	.3622-02	.3229-02	2.194	573.3	113.3
124	117.00	.50000	28.000	1.030	1.266	1.429	.3623-02	.3730-02	2.528	574.8	114.8
124	117.00	.60000	29.000	.8630	1.066	1.202	.3618-02	.3144-02	2.153	567.8	107.8
124	117.00	.70000	30.000	.7319	.8961	1.009	.3614-02	.2645-02	1.825	562.8	102.8
124	117.00	.80000	31.000	.6728	.8230	.9264	.3612-02	.2430-02	1.683	560.2	100.2
124	117.00	.90000	32.000	.2430-07	.2973-07	.3346-07	.1000+06	.2430-02	1.683	560.2	100.2
124	117.00	1.0000	33.000	.5881	.7175	.8064	.3605-02	.2120-02	1.485	552.3	92.31

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE

(RQSB05)

BOTTOM OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
126	6.150	2.951	30.00	.0000	3075.	1293.	1706.	1.814

TEST DATA

RUN NUMBER	Y(BP)	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
126	.00000	.25000-01	1.0000	2.762	3.430	3.901	.3640-02	.1005-01	6.682	616.8	156.8
126	.00000	.50000-01	2.0000	1.897	2.334	2.638	.3622-02	.6872-02	4.747	590.6	130.6
126	.00000	.75000-01	3.0000	1.694	2.079	2.346	.3617-02	.6126-02	4.272	583.9	123.9
126	.00000	.10000+00	4.0000	1.470	1.802	2.032	.3614-02	.5314-02	3.731	579.2	119.2
126	.00000	.12500	5.0000	1.312	1.607	1.810	.3612-02	.4740-02	3.342	576.5	116.5
126	.00000	.15000	6.0000	1.171	1.432	1.613	.3610-02	.4227-02	2.994	573.2	113.2
126	.00000	.17500	7.0000	1.147	1.402	1.577	.3608-02	.4139-02	2.944	570.2	110.2
126	.00000	.20000	8.0000	1.086	1.326	1.492	.3607-02	.3916-02	2.790	569.0	109.0
126	.00000	.25000	9.0000	.9637	1.176	1.322	.3605-02	.3474-02	2.485	566.1	106.1
126	.00000	.30000	10.000	.8593	1.048	1.178	.3603-02	.3096-02	2.221	563.9	103.9
126	.00000	.35000	11.000	.8598	1.049	1.178	.3603-02	.3098-02	2.222	564.0	104.0
126	.00000	.40000	12.000	.8326	1.016	1.141	.3603-02	.3000-02	2.152	564.0	104.0
126	.00000	.45000	13.000	.8001	.9757	1.095	.3602-02	.2882-02	2.071	562.9	102.9
126	.00000	.50000	14.000	.1363	.1644	.1833	.3574-02	.4870-03	.3679	526.6	65.65
126	.00000	.55000	15.000	.7517	.9161	1.029	.3501-02	.2707-02	1.951	560.7	100.7
126	.00000	.60000	16.000	.7328	.8928	1.002	.3500-02	.2638-02	1.903	560.0	99.97
126	.00000	.65000	17.000	.6921	.8431	.9463	.3599-02	.2491-02	1.799	559.2	99.22
126	.00000	.70000	18.000	.6757	.8229	.9234	.3599-02	.2432-02	1.759	558.3	98.30
126	.00000	.75000	19.000	.6385	.7776	.8727	.3599-02	.2298-02	1.661	558.4	98.37
126	.00000	.80000	20.000	.6013	.7319	.8210	.3597-02	.2163-02	1.563	556.4	96.35
126	.00000	.85000	21.000	.5505	.6698	.7512	.3597-02	.1980-02	1.437	555.7	95.68
126	.00000	.90000	22.000	.4701	.5716	.6408	.3595-02	.1690-02	1.230	553.3	93.34
126	.00000	.95000	23.000	.3824	.4647	.5207	.3593-02	.1374-02	1.004	550.8	90.77
126	.00000	1.0000	24.000	.3252	.3949	.4423	.3592-02	.1168-02	.8552	549.4	89.38
126	.00000	1.0400	25.000	.3097	.3750	.4200	.3592-02	.1103-02	.8118	549.1	89.09
126	117.00	.35000	26.000	.7481	.9143	1.029	.3608-02	.2693-02	1.919	570.4	110.4

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE

(RQSB05)

RUN NUMBER	Y(BP)	X/L	T/C NO	H/HREF P=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
126	117.00	.40000	27.000	.8122	.9943	1.120	.3611-02	.2933-02	2.072	575.1	115.1
126	117.00	.50000	28.000	.9651	1.182	1.332	.3612-02	.3486-02	2.456	576.8	116.8
126	117.00	.60000	29.000	.7973	.9745	1.096	.3607-02	.2876-02	2.046	569.9	109.9
126	117.00	.70000	30.000	.6867	.8378	.9413	.3603-02	.2474-02	1.773	564.7	104.7
126	117.00	.80000	31.000	.6034	.7416	.8327	.3601-02	.2191-02	1.578	561.2	101.2
126	117.00	.90000	32.000	.6542-01	.7902-01	.8818-01	.3577-02	.2340-03	1.758	529.5	69.52
126	117.00	1.00000	33.000	.5001	.6082	.6819	.3595-02	.1798-02	1.308	553.7	93.74

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE

(RQSB05)

BOTTOM OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
135	6.470	5.284	30.00	.0000	2880.	1159.	2579.	2.557

TEST DATA

RUN NUMBER	Y(RP)	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
135	.00000	.25000-01	1.0000	2.886	3.668	4.242	.4122-02	.1190-01	6.471	604.6	144.6
135	.00000	.50000-01	2.0000	1.924	2.420	2.777	.4100-02	.7890-02	4.468	582.3	122.3
135	.00000	.75000-01	3.0000	1.719	2.156	2.470	.4094-02	.7039-02	4.027	576.4	116.4
135	.00000	.10000+00	4.0000	1.525	1.909	2.183	.4090-02	.6236-02	3.593	572.3	112.3
135	.00000	.12500	5.0000	1.382	1.728	1.975	.4087-02	.5647-02	3.269	569.7	109.7
135	.00000	.15000	6.0000	1.214	1.516	1.732	.4084-02	.4959-02	2.894	567.0	107.0
135	.00000	.17500	7.0000	1.131	1.411	1.610	.4081-02	.4616-02	2.697	564.3	104.3
135	.00000	.20000	8.0000	1.070	1.334	1.522	.4081-02	.4365-02	2.554	563.5	103.5
135	.00000	.25000	9.0000	.9720	1.211	1.391	.4078-02	.3961-02	2.328	561.3	101.3
135	.00000	.30000	10.000	.9199	1.145	1.304	.4076-02	.3745-02	2.210	559.0	99.96
135	.00000	.35000	11.000	.8749	1.089	1.240	.4075-02	.3585-02	2.104	558.5	98.51
135	.00000	.40000	12.000	.7966	.9911	1.129	.4075-02	.3246-02	1.917	558.2	98.22
135	.00000	.45000	13.000	.7580	.9429	1.074	.4074-02	.3088-02	1.825	557.5	97.54
135	.00000	.50000	14.000	.6677-01	.1068	.1207	.4045-02	.3510-03	.2172	529.8	69.84
135	.00000	.55000	15.000	.7471	.9287	1.057	.4073-02	.3043-02	1.804	555.9	95.87
135	.00000	.60000	16.000	.7399	.9197	1.047	.4072-02	.3013-02	1.787	555.5	95.50
135	.00000	.65000	17.000	.7193	.8939	1.017	.4072-02	.2929-02	1.738	555.1	95.11
135	.00000	.70000	18.000	.6971	.8661	.9856	.4071-02	.2839-02	1.686	554.5	94.53
135	.00000	.75000	19.000	.6731	.8365	.9520	.4072-02	.2741-02	1.627	555.2	95.16
135	.00000	.80000	20.000	.6423	.7975	.9071	.4070-02	.2614-02	1.557	553.1	93.10
135	.00000	.85000	21.000	.6005	.7455	.8480	.4070-02	.2444-02	1.456	552.9	92.94
135	.00000	.90000	22.000	.5086	.6310	.7174	.4069-02	.2059-02	1.236	551.2	91.18
135	.00000	.95000	23.000	.4108	.5093	.5787	.4065-02	.1670-02	1.001	549.1	89.10
135	.00000	1.0000	24.000	.3477	.4308	.4693	.4064-02	.1413-02	.8486	548.0	87.97
135	.00000	1.0400	25.000	.3152	.3906	.4436	.4064-02	.1281-02	.7693	547.9	87.86
135	117.00	.35000	26.000	.8614	1.076	1.229	.4084-02	.3518-02	2.046	567.0	107.0

OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE

(RQ5805)

RUN NUMBER	Y(BP)	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
135	117.00	.40000	27.000	.9428	1.179	1.349	.4088-02	.3854-02	2.226	571.1	111.1
135	117.00	.50000	28.000	1.071	1.340	1.533	.4089-02	.4380-02	2.528	571.4	111.4
135	117.00	.60000	29.000	.8910	1.112	1.270	.4083-02	.3638-02	2.121	565.6	105.6
135	117.00	.70000	30.000	.7308	.9104	1.038	.4078-02	.2980-02	1.750	561.2	101.2
135	117.00	.80000	31.000	.6508	.8099	.9226	.4075-02	.2652-02	1.565	558.6	98.62
135	117.00	.90000	32.000	.5449	.6771	.7706	.4072-02	.2219-02	1.317	554.9	94.92
135	117.00	1.0000	33.000	.5360	.6654	.7568	.4069-02	.2181-02	1.299	552.8	92.75

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE

(RQSB07)

BOTTOM OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
131	6.220	3.121	30.00	1.000	3010.	1252.	1724.	1.800

TEST DATA

RUN NUMBER	Y(BP)	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
131	.00000	.25000-01	1.0000	3.048	3.777	4.290	.3562-02	.1086-01	7.042	592.2	132.2
131	.00000	.50000-01	2.0000	1.961	2.414	2.729	.3548-02	.6957-02	4.641	573.7	113.7
131	.00000	.75000-01	3.0000	1.753	2.155	2.434	.3544-02	.6214-02	4.174	569.0	109.0
131	.00000	.10000+00	4.0000	1.538	1.888	2.131	.3542-02	.5447-02	3.677	565.6	105.6
131	.00000	.12500	5.0000	1.368	1.678	1.893	.3540-02	.4843-02	3.279	563.6	103.6
131	.00000	.15000	6.0000	1.205	1.478	1.666	.3539-02	.4266-02	2.898	561.3	101.3
131	.00000	.17500	7.0000	1.126	1.379	1.554	.3537-02	.3982-02	2.715	559.0	98.95
131	.00000	.20000	8.0000	1.064	1.328	1.496	.3536-02	.3834-02	2.617	558.2	98.21
131	.00000	.25000	9.0000	.9624	1.178	1.326	.3535-02	.3402-02	2.329	556.2	96.19
131	.00000	.30000	10.000	.8763	1.072	1.206	.3533-02	.3096-02	2.125	554.5	94.52
131	.00000	.35000	11.000	.8991	1.098	1.236	.3533-02	.3173-02	2.178	554.3	94.29
131	.00000	.40000	12.000	.8656	1.059	1.191	.3533-02	.3058-02	2.100	554.0	94.00
131	.00000	.45000	13.000	.8347	1.020	1.148	.3532-02	.2948-02	2.027	553.1	93.13
131	.00000	.50000	14.000	.1195	.1451	.1625	.3515-02	.4200-03	.2979	531.6	71.61
131	.00000	.55000	15.000	.8040	.9824	1.105	.3531-02	.2839-02	1.957	551.5	91.45
131	.00000	.60000	16.000	.7555	.9231	1.038	.3530-02	.2667-02	1.840	551.0	90.96
131	.00000	.65000	17.000	.7170	.8759	.9851	.3530-02	.2531-02	1.747	550.6	90.62
131	.00000	.70000	18.000	.6946	.8484	.9540	.3530-02	.2452-02	1.693	550.0	90.04
131	.00000	.75000	19.000	.6790	.8295	.9328	.3530-02	.2397-02	1.655	550.3	90.33
131	.00000	.80000	20.000	.6363	.7768	.8732	.3528-02	.2245-02	1.554	548.5	88.54
131	.00000	.85000	21.000	.5862	.7156	.8043	.3528-02	.2068-02	1.432	548.4	88.37
131	.00000	.90000	22.000	.4993	.6092	.6846	.3527-02	.1761-02	1.222	546.8	86.83
131	.00000	.95000	23.000	.4144	.5053	.5676	.3526-02	.1461-02	1.016	544.9	84.88
131	.00000	1.0000	24.000	.3626	.4420	.4963	.3525-02	.1278-02	.8905	543.9	83.93
131	.00000	1.0400	25.000	.3056	.3730	.4192	.3528-02	.1078-02	.7465	547.9	87.90
131	117.00	.35000	26.000	.9449	1.158	1.305	.3538-02	.3343-02	2.275	560.3	100.3

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OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE

(RQSB07)

RUN NUMBER	Y(BP)	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
131	117.00	.40700	27.000	1.002	1.229	1.386	.3540-02	.3546-02	2.403	563.1	103.1
131	117.00	.50000	28.000	1.096	1.345	1.516	.3539-02	.3880-02	2.632	562.5	102.5
131	117.00	.60000	29.000	.8826	1.081	1.217	.3536-02	.3121-02	2.131	557.7	97.74
131	117.00	.70000	30.000	.7294	.8922	1.004	.3533-02	.2577-02	1.768	554.7	94.68
131	117.00	.80000	31.000	.6594	.8060	.9068	.3532-02	.2329-02	1.603	552.6	92.62
131	117.00	.90000	32.000	.1169	.1420	.1592	.3516-02	.4110-03	.2906	537.5	73.53
131	117.00	1.0000	33.000	.5895	.7193	.8083	.3527-02	.2079-02	1.442	547.0	86.98

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 FUSELAGE LOWER SURFACE

(RQS807)

BOTTOM OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
136	6.480	5.144	30.00	1.000	2890.	1163.	2572.	2.510

TEST DATA

RUN NUMBER	Y(BP)	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
136	.00000	.25000-01	1.0000	2.813	3.586	4.156	.4098-02	.1153-01	6.223	612.7	152.7
136	.00000	.50000-01	2.0000	1.940	2.442	2.805	.4073-02	.7901-02	4.468	587.1	127.1
136	.00000	.75000-01	3.0000	1.731	2.173	2.491	.4067-02	.7040-02	4.027	580.5	120.5
136	.00000	.10000+00	4.0000	1.546	1.937	2.217	.4062-02	.6281-02	3.622	575.8	115.8
136	.00000	.12500	5.0000	1.426	1.784	2.040	.4059-02	.5789-02	3.355	573.0	113.0
136	.00000	.15000	6.0000	1.258	1.571	1.795	.4055-02	.5101-02	2.974	569.4	109.4
136	.00000	.17500	7.0000	1.176	1.467	1.674	.4052-02	.4766-02	2.794	566.3	106.3
136	.00000	.20000	8.0000	1.099	1.370	1.563	.4051-02	.4452-02	2.614	565.4	105.4
136	.00000	.25000	9.0000	.9864	1.229	1.401	.4049-02	.3994-02	2.356	562.7	102.7
136	.00000	.30000	10.000	.9390	1.168	1.331	.4046-02	.3799-02	2.250	560.4	100.4
136	.00000	.35000	11.000	.8809	1.096	1.249	.4046-02	.3564-02	2.113	559.9	99.85
136	.00000	.40000	12.000	.7993	.9930	1.131	.4045-02	.3229-02	1.915	559.5	99.50
136	.00000	.45000	13.000	.7646	.9509	1.093	.4045-02	.3093-02	1.836	558.8	98.75
136	.00000	.50000	14.000	.9555-01	.1177	.1330	.4019-02	.3840-03	.2377	534.1	74.14
136	.00000	.55000	15.000	.7668	.9529	1.095	.4043-02	.3100-02	1.846	557.1	97.13
136	.00000	.60000	16.000	.7580	.9418	1.072	.4042-02	.3064-02	1.826	556.6	96.60
136	.00000	.65000	17.000	.7303	.9072	1.032	.4042-02	.2952-02	1.761	556.1	96.13
136	.00000	.70000	18.000	.7115	.8936	1.005	.4041-02	.2875-02	1.716	555.5	95.46
136	.00000	.75000	19.000	.6953	.8513	.9686	.4042-02	.2770-02	1.652	556.1	96.06
136	.00000	.80000	20.000	.6550	.8129	.9243	.4040-02	.2646-02	1.584	553.9	93.93
136	.00000	.85000	21.000	.6145	.7626	.8670	.4035-02	.2482-02	1.487	553.6	93.58
136	.00000	.90000	22.000	.5115	.6342	.7207	.4037-02	.2055-02	1.241	551.3	91.34
136	.00000	.95000	23.000	.4147	.5137	.5833	.4034-02	.1673-02	1.010	548.8	88.77
136	.00000	1.0000	24.000	.3558	.4405	.4999	.4033-02	.1435-02	.8684	547.4	87.39
136	.00000	1.0400	25.000	.2909	.3606	.4097	.4036-02	.1174-02	.7060	551.0	90.98
136	117.00	.35000	26.000	.8723	1.089	1.244	.4055-02	.3537-02	2.064	569.0	109.0

OH45 B22C7W111M4V7F5 FUSELAGE LOWER SURFACE (RQSB07)

RUN NUMBER	Y(BP)	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
136	117.00	.40000	27.000	.9175	1.148	1.313	.4060-02	.3725-02	2.155	573.9	113.9
136	117.00	.50000	28.000	1.041	1.303	1.491	.4061-02	.4226-02	2.441	575.0	115.0
136	117.00	.60000	29.000	.8757	1.090	1.244	.4054-02	.3538-02	2.067	568.3	108.3
136	117.00	.70000	30.000	.7133	.8885	1.013	.4049-02	.2888-02	1.703	562.8	102.8
136	117.00	.80000	31.000	.6429	.7998	.9110	.4046-02	.2601-02	1.542	559.8	99.76
136	117.00	.90000	32.000	.5427	.6739	.7666	.4041-02	.2193-02	1.310	555.3	95.30
136	117.00	1.0000	33.000	.5202	.6454	.7338	.4039-02	.2101-02	1.259	553.1	93.09

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OH45 HEATING RATE - COLLATION

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B22C7W111M4V7F5 FUSELAGE CHINE

(RQSC01)

FUSELAGE CHINE

PARAMETRIC DATA

ALPHA = 25.00 BETA = .0000 MACH = 6.000 ALPHAS = 25.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
125	6.150	2.956	25.00	.0000	3065.	1289.	1709.	1.825

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
125	30.000	.10000+00	50.000	1.741	2.134	2.405	.3619-02	.6299-02	4.408	577.6	117.6
125	30.000	.15000	51.000	1.423	1.740	1.959	.3614-02	.5143-02	3.637	570.3	110.3
125	30.000	.20000	52.000	1.051	1.282	1.440	.3608-02	.3791-02	2.710	562.7	102.7

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OH45

B22C7W111M4V7F5 FUSELAGE CHINE

(RQSC03)

FUSELAGE CHINE

PARAMETRIC DATA

ALPHA = 35.00 BETA = .0000 MACH = 6.000 ALPHAS = 35.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
124	6.180	3.149	35.00	.0000	3025.	1264.	1740.	1.861

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
124	30.000	.10000+00	50.000	1.835	2.265	2.565	.3632-02	.6665-02	4.440	586.4	126.4
124	30.000	.15000	51.000	1.648	2.032	2.299	.3629-02	.5982-02	4.009	582.4	122.4
124	30.000	.20000	52.000	1.222	1.501	1.695	.3621-02	.4425-02	3.009	572.7	112.7

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OH45 HEATING RATE - COLLATION

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B22C7W111M4V7F5 FUSELAGE CHINE

(RQSC05)

FUSELAGE CHINE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
126	6.150	2.951	30.00	.0000	3075.	1293.	1706.	1.814

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCL DEG. F
126	30.000	.10000+00	50.000	1.796	2.208	2.494	.3620-02	.6502-02	4.508	588.0	128.0
126	30.000	.15000	51.000	1.520	1.863	2.101	.3615-02	.5493-02	3.849	580.7	120.7
126	30.000	.20000	52.000	1.136	1.389	1.564	.3609-02	.4100-02	2.908	572.1	112.1

OH45

B22C7W111M4V7F5 FUSELAGE CHINE

(RQSC05)

FUSELAGE CHINE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
135	6.470	5.284	30.00	.0000	2880.	1159.	2578.	2.557

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
135	30.000	.10000+00	50.000	1.842	2.314	2.655	.4098-02	.7549-02	4.288	580.6	120.6
135	30.000	.15000	51.000	1.607	2.013	2.305	.4092-02	.6574-02	3.773	574.7	114.7
135	30.000	.20000	52.000	1.204	1.504	1.718	.4085-02	.4918-02	2.857	567.6	107.6

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OH45 HEATING RATE - COLLATION

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B22C7W111M4V7F5 FUSELAGE CHINE

(RQSC07)

FUSELAGE CHINE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	T0 DEG.R	P0 PSI	PT2 PSI
131	6.220	3.121	30.00	1.000	3010.	1252.	1724.	1.800

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
131	30.000	.10000+00	50.000	1.955	2.406	2.720	.3547-02	.6935-02	4.631	573.0	113.0
131	30.000	.15000	51.000	1.676	2.059	2.324	.3543-02	.5937-02	3.997	567.5	107.5
131	30.000	.20000	52.000	1.316	1.613	1.818	.3539-02	.4655-02	3.165	560.8	100.8

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OH45

B22C7W111M4V7F5 FUSELAGE CHINE

(RQSC07)

FUSELAGE CHINE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
136	6.480	5.144	30.00	1.000	2890.	1163.	2572.	2.510

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
136	30.000	.10000+00	50.000	1.939	2.440	2.803	.4073-02	.7895-02	4.468	586.7	126.7
136	30.000	.15000	51.000	1.667	2.091	2.396	.4065-02	.6776-02	3.885	579.3	119.3
136	30.000	.20000	52.000	1.199	1.498	1.711	.4055-02	.4862-02	2.832	570.1	110.1

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OH45 HEATING RATE - COLLATION

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B22C7W111M4V7F5 FUSELAGE UPPER SURFACE

(RQSU02)

TOP OF FUSELAGE

PARAMETRIC DATA

ALPHA = 25.00 BETA = .0000 MACH = 6.000 ALPHAS = 25.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEC.	V FT/SEC	TO DEG.R	PO PSI	PTC PSI
127	6.150	3.034	25.00	.0000	3075.	1293.	1754.	1.858

TEST DATA

RUN NUMBER	X/L	Z(WL)	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
127	.17000	472.90	53.000	.1296	.1582	.1776	.3644-02	.4730-03	.3410	560.3	100.3
127	.30000	375.00	34.000	.2340	.2848	.3195	.3641-02	.8520-03	.6174	557.1	97.06
127	.30000	435.00	35.000	.1620	.1972	.2212	.3641-02	.5900-03	.4279	556.3	96.32
127	.30000	501.00	36.000	.2775-01	.3373-01	.3781-01	.3639-02	.1010-03	.7368-01	553.9	93.91
127	.40000	375.00	37.000	.2617	.3186	.3575	.3641-02	.9530-03	.6903	557.0	96.96
127	.40000	425.00	38.000	.2266	.2758	.3094	.3641-02	.8250-03	.5978	556.4	96.37
127	.40000	501.00	39.000	.5304-01	.6448-01	.7229-01	.3639-02	.1930-03	.1406	554.2	94.19
127	.42500	400.00	54.000	.4730-08	.5764-08	.6471-08	.1000+06	.4730-03	.3410	560.3	100.3
127	.50000	375.00	40.000	.1256	.1527	.1712	.3639-02	.4570-03	.3326	553.7	93.71
127	.50000	425.00	41.000	.2883	.3510	.3939	.3642-02	.1050-02	.7598	557.6	97.65
127	.50000	501.00	42.000	.8081-01	.9923-01	.1101	.3638-02	.2940-03	.2145	552.8	92.78
127	.60000	375.00	43.000	.8604-01	.1046	.1173	.3638-02	.3130-03	.2278	553.2	93.15
127	.60000	425.00	44.000	.2719	.3309	.3711	.3641-02	.9900-03	.7182	556.2	96.16
127	.60000	501.00	45.000	.8881-01	.1080	.1210	.3637-02	.3230-03	.2354	552.0	92.04
127	.70000	375.00	46.000	.2339-01	.2844-01	.3189-01	.3636-02	.8500-04	.6175-01	550.8	90.81
127	.70000	425.00	47.000	.9593-01	.1166	.1307	.3638-02	.3490-03	.2542	552.9	92.89
127	.70000	501.00	48.000	.7231-01	.8788-01	.9849-01	.3637-02	.2630-03	.1919	551.4	91.38
127	.82500	465.00	49.000	.3381-01	.4110-01	.4607-01	.3638-02	.1230-03	.8967-01	552.9	92.87

OH45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE

(RGSU04)

TOP OF FUSELAGE

PARAMETRIC DATA

ALPHA = 35.00 BETA = .0000 MACH = 6.000 ALPHAS = 35.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
123	6.190	3.221	35.00	.0000	3020.	1258.	1751.	1.873

TEST DATA

RUN NUMBER	X/L	Z(WL)	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
123	.17000	472.90	53.000	.1706	.2075	.2327	.3599-02	.6140-03	.4339	539.5	79.53
123	.30000	375.00	34.000	.2335	.2838	.3182	.3598-02	.8400-03	.5953	537.9	77.86
123	.30000	425.00	35.000	.1562	.1833	.2128	.3597-02	.5620-03	.3991	536.4	76.40
123	.30000	501.00	36.000	.2533-01	.3070-01	.3435-01	.3593-02	.9100-04	.6536-01	532.2	72.15
123	.40000	375.00	37.000	.2152	.2616	.2931	.3597-02	.7740-03	.5491	537.0	76.98
123	.40000	425.00	39.000	.2638	.3207	.3595	.3598-02	.9490-03	.6726	538.1	78.07
123	.40000	501.00	39.000	.5008-01	.6083-01	.6815-01	.3594-02	.1800-03	.1281	533.0	73.04
123	.42500	400.00	54.000	.6140-08	.7470-08	.8377-08	.1000-06	.6140-03	.4339	539.5	79.53
123	.50000	375.00	40.000	.9402-01	.1142	.1279	.3595-02	.3380-03	.2409	533.9	73.89
123	.50000	425.00	41.000	.2790	.3392	.3803	.3599-02	.1004-02	.7108	538.6	78.58
123	.50000	501.00	42.000	.9374-01	.1139	.1274	.3595-02	.3370-03	.2405	533.7	73.69
123	.60000	375.00	43.000	.4991-01	.6050-01	.6777-01	.3594-02	.1790-03	.1274	533.1	73.09
123	.60000	425.00	44.000	.1649	.2004	.2245	.3597-02	.5930-03	.4210	536.3	76.34
123	.60000	501.00	45.000	.8208-01	.9961-01	.1115	.3594-02	.2950-03	.2109	532.8	72.81
123	.70000	375.00	46.000	.2672-01	.3246-01	.3636-01	.3593-02	.9600-04	.6832-01	532.0	72.02
123	.70000	425.00	47.000	.5313-01	.6452-01	.7227-01	.3595-02	.1910-03	.1361	533.7	73.66
123	.70000	501.00	48.000	.6874-01	.8347-01	.9347-01	.3593-02	.2470-03	.1762	532.2	72.22
123	.82500	465.00	49.000	.2504-02	.3039-02	.3403-02	.3594-02	.9000-05	.6430-02	533.3	73.34

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE

(RQSU06)

TOP OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	T0 DEG.R	PC PSI	PT2 PSI
121	6.150	2.987	30.00	.0000	3060.	1286.	1688.	1.818

TEST DATA

RUN NUMBER	X/L	Z(WL)	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
121	.17000	472.90	53.000	.1600	.1941	.2172	.3582-02	.5730-03	.4195	541.9	81.90
121	.30000	375.00	34.000	.2115	.2563	.2867	.3580-02	.7570-03	.5565	539.2	79.17
121	.30000	425.00	35.000	.1369	.1659	.1856	.3579-02	.4900-03	.3604	538.3	78.28
121	.30000	501.00	36.000	.5478-01	.6631-01	.7411-01	.3578-02	.1960-03	.1449	536.1	76.13
121	.40000	375.00	37.000	.2909	.3528	.3949	.3582-02	.1042-02	.7633	541.7	81.66
121	.40000	425.00	38.000	.2257	.2735	.3059	.3580-02	.8080-03	.5946	538.6	78.61
121	.40000	501.00	39.000	.5702-01	.6903-01	.7717-01	.3578-02	.2040-03	.1507	537.0	77.02
121	.42500	400.00	54.000	.5730-08	.6951-08	.7780-08	.1000+06	.5730-03	.4195	541.9	81.90
121	.50000	375.00	40.000	.1780	.2156	.2411	.3579-02	.6370-03	.4693	537.9	77.88
121	.50000	425.00	41.000	.3113	.3775	.4225	.3582-02	.1115-02	.8172	541.7	81.70
121	.50000	501.00	42.000	.6995-01	.8462-01	.9462-01	.3579-02	.2500-03	.1842	537.6	77.65
121	.60000	375.00	43.000	.1224	.1482	.1657	.3578-02	.4380-03	.3236	536.1	76.11
121	.60000	425.00	44.000	.3230	.3918	.4386	.3582-02	.1157-02	.8470	542.2	82.21
121	.60000	501.00	45.000	.1247	.1510	.1698	.3578-02	.4460-03	.3290	536.1	76.09
121	.70000	375.00	46.000	.4277-01	.5180-01	.5791-01	.3577-02	.1530-03	.1129	535.4	75.35
121	.70000	425.00	47.000	.2212	.2691	.3000	.3580-02	.7920-03	.5821	539.4	79.37
121	.70000	501.00	48.000	.8273-01	.1002	.1120	.3578-02	.2950-03	.2194	536.8	76.77
121	.82500	465.00	49.000	.3406	.4132	.4624	.3582-02	.1220-02	.8932	542.1	82.09

ORIGINAL PAGE IS
OF POOR QUALITY

OH45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE

(RQSU06)

TOP OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TC DEG.R	PO PSI	PT2 PSI
134	6.460	5.313	30.00	.0000	2880.	1157.	2530.	2.594

TEST DATA

RUN NUMBER	X/L	Z(WL)	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
134	.17000	472.90	53.000	.1600	.1981	.2249	.4087-02	.6540-03	.3936	544.7	84.72
134	.30000	375.00	34.000	.2292	.2835	.3215	.4084-02	.9360-03	.5656	542.1	92.10
134	.30000	425.00	35.000	.1452	.1796	.2037	.4085-02	.5930-03	.3580	542.9	82.89
134	.30000	501.00	36.000	.3751-01	.4629-01	.5243-01	.4079-02	.1530-03	.9333-01	537.5	77.49
134	.40000	375.00	37.000	.2725	.3371	.3824	.4085-02	.1113-02	.6717	543.2	83.16
134	.40000	425.00	38.000	.2424	.2997	.3399	.4084-02	.9900-03	.5999	541.9	81.89
134	.40000	501.00	39.000	.9777-01	.1208	.1370	.4081-02	.3990-03	.2420	539.4	79.41
134	.42500	400.00	54.000	.6540-08	.8097-08	.9191-08	.1000+06	.6540-03	.3936	544.7	84.72
134	.50000	375.00	40.000	.1382	.1707	.1935	.4081-02	.5640-03	.3426	539.2	79.24
134	.50000	425.00	41.000	.2396	.3707	.4207	.4086-02	.1224-02	.7379	543.8	83.84
134	.50000	501.00	42.000	.7952-01	.9834-01	.1114	.4082-02	.3250-03	.1975	539.8	79.79
134	.60000	375.00	43.000	.8775-01	.1084	.1226	.4080-02	.3580-03	.2175	538.2	78.25
134	.60000	425.00	44.000	.2989	.3698	.4196	.4085-02	.1221-02	.7366	543.1	83.10
134	.60000	501.00	45.000	.8089-01	.9984-01	.1131	.4080-02	.3300-03	.2011	537.8	77.84
134	.70000	375.00	46.000	.1643-01	.2031-01	.2302-01	.4078-02	.6700-04	.4060-01	536.5	76.48
134	.70000	425.00	47.000	.9630-01	.1189	.1348	.4081-02	.3930-03	.2399	538.7	78.75
134	.70000	501.00	48.000	.8492-01	.1047	.1186	.4079-02	.3460-03	.2111	537.2	77.22
134	.82500	465.00	49.000	.3136-01	.3878-01	.4397-01	.4081-02	.1280-03	.7749-01	539.0	79.05

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE

(RQSU08)

TOP OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	T0 DEG.R	P0 PSI	PT2 PSI
130	6.200	3.121	30.00	1.000	3020.	1260.	1706.	1.800

TEST DATA

RUN NUMBER	X/L	Z(WL)	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
130	.17000	472.90	53.000	.9626-01	.1171	.1313	.3532-02	.3400-03	.2408	540.5	80.48
130	.30000	375.00	34.000	.2233	.2718	.3050	.3534-02	.7890-03	.5562	543.6	83.57
130	.30000	425.00	35.000	.1552	.1887	.2115	.3530-02	.5480-03	.3893	538.4	78.43
130	.30000	501.00	36.000	.3941-01	.4782-01	.5353-01	.3527-02	.1390-03	.9962-01	534.4	74.44
130	.40000	375.00	37.000	.2706	.3293	.3693	.3533-02	.9560-03	.6760	541.6	81.63
130	.40000	425.00	38.000	.2661	.3237	.3649	.3532-02	.9400-03	.6661	540.2	80.16
130	.40000	501.00	39.000	.5442-01	.6608-01	.7401-01	.3528-02	.1920-03	.1371	535.5	75.54
130	.42500	400.00	54.000	.3400-08	.4136-08	.4638-08	.1000+06	.3400-03	.2408	540.5	80.48
130	.50000	375.00	40.000	.1581	.1921	.2153	.3529-02	.5580-03	.3971	537.1	77.11
130	.50000	425.00	41.000	.2999	.3652	.4097	.3534-02	.1060-02	.7478	543.0	83.01
130	.50000	501.00	42.000	.9441-01	.1146	.1284	.3527-02	.3330-03	.2378	535.0	75.01
130	.60000	375.00	43.000	.1092	.1325	.1484	.3527-02	.3850-03	.2751	534.9	74.92
130	.60000	425.00	44.000	.2751	.3349	.3756	.3533-02	.9720-03	.6866	542.2	82.21
130	.60000	501.00	45.000	.9725-01	.1181	.1323	.3527-02	.3430-03	.2449	534.6	74.59
130	.70000	375.00	46.000	.5899-01	.7161-01	.8018-01	.3526-02	.2080-03	.1487	532.7	72.73
130	.70000	425.00	47.000	.1445	.1756	.1968	.3529-02	.5100-03	.3629	537.4	77.38
130	.70000	501.00	48.000	.7513-01	.9124-01	.1022	.3527-02	.2650-03	.1892	534.0	73.97
130	.82500	465.00	49.000	.1745	.2121	.2377	.3531-02	.6160-03	.4374	539.1	79.06

ORIGINAL PAGE IS
OF POOR QUALITY

OH45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE

(RQSU08)

TOP OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
137	6.480	5.244	30.00	1.000	2890.	1164.	2622.	2.528

TEST DATA

RUN NUMBER	X/L	Z(WL)	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
137	.17000	472.90	53.000	.1571	.1954	.2225	.4061-02	.6380-03	.3790	559.8	99.80
137	.30000	375.00	34.000	.2575	.3199	.3640	.4058-02	.1045-02	.6238	556.8	96.82
137	.30000	425.00	35.000	.1681	.2087	.2374	.4057-02	.6820-03	.4081	555.3	95.28
137	.30000	501.00	36.000	.3676-01	.4556-01	.5174-01	.4053-02	.1490-03	.8985-01	551.4	91.39
137	.40000	375.00	37.000	.3372	.4193	.4773	.4060-02	.1369-02	.8141	558.9	98.87
137	.40000	425.00	38.000	.2598	.3227	.3671	.4057-02	.1054-02	.6236	556.0	95.96
137	.40000	501.00	39.000	.8527-01	.1064	.1209	.4053-02	.3480-03	.2096	551.9	91.87
137	.42500	400.00	54.000	.6380-08	.755-08	.9036-08	.1000+06	.6380-03	.3790	559.8	99.80
137	.50000	375.00	40.000	.2032	.2521	.2865	.4055-02	.8240-03	.4942	553.4	93.41
137	.50000	425.00	41.000	.3628	.4511	.5135	.4060-02	.1473-02	.8762	558.5	98.50
137	.50000	501.00	42.000	.8214-01	.1019	.1158	.4054-02	.3330-03	.1999	552.8	92.81
137	.60000	375.00	43.000	.1024	.1269	.1442	.4053-02	.4150-03	.2498	552.1	92.06
137	.60000	425.00	44.000	.3685	.4581	.5216	.4060-02	.1496-02	.8897	558.8	98.80
137	.60000	501.00	45.000	.8539-01	.1058	.1201	.4052-02	.3460-03	.2089	550.5	90.54
137	.70000	375.00	46.000	.3135-01	.3883-01	.4409-01	.4051-02	.1270-03	.7672-01	549.5	89.50
137	.70000	425.00	47.000	.1605	.1992	.2265	.4055-02	.6510-03	.3905	553.3	93.34
137	.70000	501.00	48.000	.7034-01	.8718-01	.9905-01	.4052-02	.2850-03	.1717	550.9	90.88
137	.82500	465.00	49.000	.1053	.1307	.1487	.4057-02	.4270-03	.2552	555.7	95.69

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE

(RQSU09)

TOP OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = 90.00

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
128	6.140	2.968	30.00	.0000	3080.	1296.	1726.	1.852

TEST DATA

RUN NUMBER	X/L	Z(WL)	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
128	.17000	472.90	53.000	.1891	.2291	.2562	.3628-02	.6860-03	.5091	542.1	82.06
128	.30000	375.00	34.000	.2326	.2819	.3153	.3629-02	.8440-03	.6252	543.3	83.30
128	.30000	425.00	35.000	.1728	.2094	.2341	.3628-02	.6270-03	.4655	542.2	82.18
128	.30000	501.00	36.000	.7117-01	.8614-01	.9627-01	.3625-02	.2580-03	.1924	538.6	78.59
128	.40000	375.00	37.000	.2711	.3287	.3678	.3629-02	.9840-03	.7281	544.4	84.35
128	.40000	425.00	38.000	.2417	.2929	.3276	.3629-02	.8770-03	.6499	543.6	83.56
128	.40000	501.00	39.000	.8439-01	.1022	.1142	.3626-02	.3060-03	.2276	539.4	79.37
128	.42500	400.00	54.000	.6860-08	.8311-08	.9295-08	.1000+06	.6860-03	.5091	542.1	82.06
128	.50000	375.00	40.000	.1486	.1801	.2014	.3628-02	.5390-03	.3994	543.2	83.16
128	.50000	425.00	41.000	.2919	.3541	.3963	.3631-02	.1060-02	.7824	546.1	86.07
128	.50000	501.00	42.000	.1078	.1306	.1460	.3627-02	.3910-03	.2903	541.1	81.08
128	.60000	375.00	43.000	.7862-01	.9516-01	.1064	.3625-02	.2850-03	.2125	539.2	79.23
128	.60000	425.00	44.000	.2413	.2926	.3274	.3630-02	.8760-03	.6480	544.9	84.87
128	.60000	501.00	45.000	.8025-01	.9714-01	.1096	.3626 02	.2910-03	.2169	539.6	79.60
128	.70000	375.00	46.000	.3448-01	.4173-01	.4664-01	.3625-02	.1250-03	.9325-01	539.6	78.60
128	.70000	425.00	47.000	.1034	.1252	.1400	.3627-02	.3750-03	.2788	541.2	81.24
128	.70000	501.00	48.000	.9159-01	.1109	.1239	.3625-02	.3320-03	.2474	539.0	79.00
128	.82500	465.00	49.000	.4190-01	.5077-01	.5679-01	.3628-02	.1520-03	.1127	542.1	82.14

OH45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE

(RQSU09)

TOP OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = 90.00

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
133	6.460	5.645	30.00	.0000	2870.	1154.	2626.	2.691

TEST DATA

RUN NUMBER	X/L	Z(WL)	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
133	.17000	472.90	53.000	.2758	.3413	.3873	.4155-02	.1146-02	.6891	542.2	82.16
133	.30000	375.00	34.000	.2638	.3264	.3704	.4155-02	.1096-02	.6590	542.1	82.08
133	.30000	425.00	35.000	.1673	.2069	.2347	.4154-02	.6950-03	.4188	541.2	81.17
133	.30000	501.00	36.000	.6357-01	.7857-01	.8909-01	.4153-02	.2640-03	.1595	540.0	80.02
133	.40000	375.00	37.000	.3311	.4099	.4652	.4156-02	.1376-02	.8262	543.3	83.35
133	.40000	425.00	38.000	.2513	.3109	.3529	.4155-02	.1044-02	.6277	542.2	82.19
133	.40000	501.00	39.000	.9244-01	.1144	.1298	.4154-02	.3840-03	.2310	541.7	81.69
133	.42500	400.00	54.000	.1146-07	.1418-07	.1609-07	.1000+06	.1146-02	.6891	542.2	82.16
133	.50000	375.00	40.000	.1539	.1903	.2158	.4153-02	.6390-03	.3854	540.7	80.73
133	.50000	425.00	41.000	.3637	.4505	.5115	.4157-02	.1512-02	.9061	544.3	84.30
133	.50000	501.00	42.000	.1194	.1477	.1675	.4153-02	.4960-03	.2991	540.2	80.22
133	.60000	375.00	43.000	.4865-01	.6014-01	.6819-01	.4152-02	.2020-03	.1220	539.5	79.50
133	.60000	425.00	44.000	.3245	.4018	.4561	.4157-02	.1349-02	.8092	543.9	83.86
133	.60000	501.00	45.000	.7078-01	.8757-01	.9936-01	.4154-02	.2940-03	.1769	541.4	81.39
133	.70000	375.00	46.000	.1421-01	.1753-01	.1986-01	.4152-02	.5900-04	.3591-01	539.3	79.31
133	.70000	425.00	47.000	.1088	.1346	.1529	.4155-02	.4520-03	.2716	542.4	82.43
133	.70000	501.00	48.000	.6983-01	.8636-01	.9796-01	.4153-02	.2900-03	.1748	540.7	80.68
133	.82500	465.00	49.000	.3370-01	.4170-01	.4732-01	.4154-02	.1400-03	.8423-01	541.0	80.99

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE

(RGSU10)

TOP OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = 90.00

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
129	6.130	3.008	30.00	1.000	3085.	1299.	1749.	1.878

TEST DATA

RUN NUMBER	X/L	Z(WL)	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
129	.17000	472.90	53.000	.2034	.2465	.2757	.3658-02	.7440-03	.5527	544.2	84.17
129	.30000	375.00	34.000	.2451	.2973	.3326	.3659-02	.8970-03	.6646	546.0	86.04
129	.30000	425.00	35.000	.1612	.1955	.2187	.3659-02	.5900-03	.4377	544.9	84.90
129	.30000	501.00	36.000	.3474-01	.4207-01	.4703-01	.3656-02	.1270-03	.9465-01	541.3	81.30
129	.40000	375.00	37.000	.2975	.3609	.4040	.3661-02	.1089-02	.8046	548.2	88.17
129	.40000	425.00	38.000	.2561	.3105	.3474	.3659-02	.9370-03	.6946	546.2	86.17
129	.40000	501.00	39.000	.6727-01	.8147-01	.9108-01	.3657-02	.2460-03	.1833	543.0	83.04
129	.42500	400.00	54.000	.7440-08	.9017-08	.1009-07	.1000+06	.7440-03	.5527	544.2	84.17
129	.50000	375.00	40.000	.1741	.2110	.2360	.3658-02	.6370-03	.4734	544.5	84.46
129	.50000	425.00	41.000	.3479	.4223	.4728	.3662-02	.1274-02	.9396	549.8	89.80
129	.50000	501.00	42.000	.8914-01	.1080	.1208	.3657-02	.3260-03	.2426	542.7	82.69
129	.60000	375.00	43.000	.1203	.1458	.1630	.3657-02	.4400-03	.3274	543.0	82.96
129	.60000	425.00	44.000	.2987	.3626	.4059	.3662-02	.1094-02	.8072	549.4	89.39
129	.60000	501.00	45.000	.1042	.1262	.1411	.3657-02	.3910-03	.2837	542.7	82.67
129	.70000	375.00	46.000	.3364-01	.4075-01	.4557-01	.3656-02	.1230-03	.9158-01	542.1	82.09
129	.70000	425.00	47.000	.1768	.2144	.2399	.3659-02	.6470-03	.4800	545.7	85.73
129	.70000	501.00	48.000	.6100-01	.7390-01	.8265-01	.3656-02	.2230-03	.1659	542.0	82.04
129	.82500	465.00	49.000	.1669	.2025	.2267	.3661-02	.6110-03	.4513	548.2	88.16

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OF POOR QUALITY

OH45

B22C7W111M4V7F5 FUSELAGE UPPER SURFACE

(RQSU10)

TOP OF FUSELAGE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = 90.00

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
132	6.470	6.124	30.00	1.000	2825.	1128.	2606.	2.790

TEST DATA

RUN NUMBER	X/L	Z(WL)	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
132	.17000	472.90	53.000	.2672	.3317	.3772	.4180-02	.1117-02	.6482	537.3	77.32
132	.30000	375.00	34.000	.2550	.3165	.3599	.4180-02	.1066-02	.6189	537.2	77.18
132	.30000	425.00	35.000	.1888	.2343	.2664	.4179-02	.7890-03	.4584	536.6	76.65
132	.30000	501.00	36.000	.3565-01	.4422-01	.5026-01	.4179-02	.1490-03	.8675-01	535.9	75.88
132	.40000	375.00	37.000	.3835	.4763	.5419	.4182-02	.1604-02	.9289	538.7	78.72
132	.40000	425.00	38.000	.2495	.3096	.3521	.4180-02	.1043-02	.6059	537.1	77.09
132	.40000	501.00	39.000	.1046	.1297	.1474	.4178-02	.4370-03	.2545	535.7	75.71
132	.42500	400.00	54.000	.1117-07	.1387-07	.1577-07	.1000+06	.1117-02	.6482	537.3	77.32
132	.50000	375.00	40.000	.1899	.2346	.2669	.4182-02	.7900-03	.4575	539.0	78.96
132	.50000	425.00	41.000	.3826	.4751	.5405	.4182-02	.1600-02	.9266	538.7	78.70
132	.50000	501.00	42.000	.1168	.1449	.1646	.4178-02	.4880-03	.2842	535.8	75.76
132	.60000	375.00	43.000	.9569-01	.1188	.1350	.4180-02	.4000-03	.2324	536.8	76.77
132	.60000	425.00	44.000	.4148	.5152	.5862	.4183-02	.1735-02	1.004	539.3	79.35
132	.60000	501.00	45.000	.9789-01	.1214	.1380	.4178-02	.4090-03	.2380	535.6	75.60
132	.70000	375.00	46.000	.4213-01	.5223-01	.5935-01	.4178-02	.1760-03	.1026	535.3	75.26
132	.70000	425.00	47.000	.1732	.2150	.2444	.4180-02	.7240-03	.4205	537.2	77.15
132	.70000	501.00	48.000	.9215-01	.1143	.1298	.4178-02	.3850-03	.2245	535.1	75.12
132	.82500	465.00	49.000	.1948	.2421	.2756	.4184-02	.8150-03	.4702	540.9	80.94

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW02)

WING LOWER SURFACE

PARAMETRIC DATA

ALPHA = 25.00 BETA = .0000 MACH = 6.000 ALPHAS = 25.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
127	6.150	3.034	25.00	.0000	3075.	1293.	1754.	1.858

TEST DATA

RUN NUMBER	2Y/B	X/C	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
127	.40000	.50000-01	55.000	1.659	2.043	2.310	.3667-02	.6084-02	4.190	592.7	132.7
127	.40000	.10000+00	56.000	1.511	1.856	2.096	.3663-02	.5535-02	3.847	586.2	126.2
127	.40000	.20000	57.000	1.104	1.352	1.523	.3655-02	.4035-02	2.846	575.9	115.9
127	.40000	.30000	58.000	.8527	1.042	1.173	.3652-02	.3114-02	2.212	571.0	111.0
127	.40000	.40000	59.000	.7732	.9447	1.063	.3650-02	.2822-02	2.010	569.4	109.4
127	.40000	.50000	60.000	.7103	.8675	.9754	.3649-02	.2592-02	1.850	567.5	107.5
127	.40000	.60000	61.000	.6669	.8141	.9150	.3648-02	.2433-02	1.741	566.0	106.0
127	.40000	.70000	62.000	.6205	.7571	.8507	.3647-02	.2263-02	1.622	564.7	104.7
127	.40000	.80000	63.000	.5416	.6603	.7415	.3645-02	.1974-02	1.420	562.3	102.3
127	.40000	.90000	64.000	.4214	.5133	.5762	.3643-02	.1535-02	1.108	559.8	99.78
127	.60000	.10000+00	65.000	1.526	1.872	2.112	.3660-02	.5584-02	3.901	582.8	122.8
127	.60000	.20000	66.000	1.453	1.781	2.009	.3659-02	.5315-02	3.723	581.0	121.0
127	.60000	.30000	67.000	1.280	1.569	1.769	.3657-02	.4692-02	3.290	578.6	118.6
127	.60000	.40000	68.000	1.199	1.469	1.655	.3656-02	.4383-02	3.085	577.3	117.3
127	.60000	.50000	69.000	1.117	1.367	1.539	.3655-02	.4081-02	2.882	575.2	115.2
127	.60000	.60000	70.000	1.019	1.246	1.403	.3653-02	.3721-02	2.636	572.9	112.9
127	.60000	.70000	71.000	.9313	1.138	1.281	.3651-02	.3400-02	2.416	570.7	110.7
127	.60000	.80000	72.000	.7682	.9382	1.055	.3649-02	.2803-02	1.999	567.9	107.9
127	.60000	.90000	73.000	.5539	.6757	.7593	.3647-02	.2020-02	1.448	564.3	104.3
127	.80000	.20000	74.000	1.333	1.632	1.839	.3656-02	.4872-02	3.433	576.8	116.8
127	.80000	.40000	75.000	1.039	1.270	1.429	.3652-02	.3794-02	2.693	571.4	111.4
127	.80000	.60000	76.000	.9326	1.140	1.282	.3651-02	.3405-02	2.423	569.8	109.8

OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW04)

WING LOWER SURFACE

PARAMETRIC DATA

ALPHA = 35.00 BETA = .0000 MACH = 6.000 ALPHAS = 35.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
123	6.190	3.221	35.00	.0000	3020.	1258.	1751.	1.873

TEST DATA

RUN NUMBER	2Y/B	X/C	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
123	.40000	.50000-01	55.000	1.560	1.927	2.183	.3635-02	.5672-02	3.751	585.3	125.3
123	.40000	.10000+00	56.000	1.459	1.798	2.035	.3631-02	.5299-02	3.537	579.2	119.2
123	.40000	.20000	57.000	1.162	1.426	1.609	.3621-02	.4208-02	2.861	566.8	106.6
123	.40000	.30000	58.000	.9223	1.129	1.272	.3616-02	.3335-02	2.291	559.7	99.74
123	.40000	.40000	59.000	.7933	.9704	1.092	.3614-02	.2867-02	1.977	557.3	97.28
123	.40000	.50000	60.000	.7109	.8688	.9773	.3611-02	.2567-02	1.777	554.5	94.46
123	.40000	.60000	61.000	.6465	.7897	.8880	.3610-02	.2334-02	1.620	552.6	92.63
123	.40000	.70000	62.000	.6024	.7354	.8267	.3609-02	.2174-02	1.512	551.1	91.09
123	.40000	.80000	63.000	.5433	.6626	.7444	.3606-02	.1959-02	1.368	548.2	88.23
123	.40000	.90000	64.000	.4362	.5315	.5966	.3604-02	.1572-02	1.103	545.0	84.96
123	.60000	.10000+00	65.000	1.601	1.971	2.229	.3628-02	.5810-02	3.895	576.3	116.3
123	.60000	.20000	66.000	1.569	1.931	2.182	.3627-02	.5692-02	3.824	574.2	114.9
123	.60000	.30000	67.000	1.355	1.665	1.879	.3624-02	.4911-02	3.323	570.1	110.1
123	.60000	.40000	68.000	1.257	1.543	1.741	.3522-02	.4553-02	3.092	567.6	107.6
123	.60000	.50000	69.000	1.165	1.429	1.611	.3619-02	.4217-02	2.878	564.3	104.3
123	.60000	.60000	70.000	1.063	1.302	1.466	.3616-02	.3844-02	2.637	560.7	100.7
123	.60000	.70000	71.000	.9527	1.166	1.313	.3615-02	.3444-02	2.369	558.7	98.67
123	.60000	.80000	72.000	.7668	.9372	1.054	.3611-02	.2769-02	1.917	554.5	94.54
123	.60000	.90000	73.000	.5571	.6800	.7643	.3608-02	.2010-02	1.399	550.7	90.68
123	.80000	.20000	74.000	1.441	1.770	1.998	.3623-02	.5222-02	3.536	569.5	109.5
123	.80000	.40000	75.000	1.227	1.504	1.696	.3618-02	.4441-02	3.036	563.1	103.1
123	.80000	.60000	76.000	1.064	1.302	1.466	.3615-02	.3845-02	2.643	559.2	99.23

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B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW06)

WING LOWER SURFACE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
121	6.150	2.987	30.00	.0000	3060.	1286.	1688.	1.818

TEST DATA

RUN NUMBER	2Y/B	X/C	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
121	.40000	.50000-01	55.000	1.440	1.767	1.993	.3610-02	.5200-02	3.616	575.1	119.1
121	.40000	.10000+00	56.000	1.330	1.628	1.834	.3605-02	.4794-02	3.363	573.0	113.0
121	.40000	.20000	57.000	.9981	1.217	1.368	.3596-02	.3589-02	2.561	560.7	100.7
121	.40000	.30000	58.000	.7514	.9148	1.026	.3592-02	.2699-02	1.943	554.5	94.55
121	.40000	.40000	59.000	.6368	.7748	.8689	.3590-02	.2286-02	1.651	552.4	92.42
121	.40000	.50000	60.000	.5822	.7080	.7937	.3588-02	.2099-02	1.512	550.3	90.30
121	.40000	.60000	61.000	.5367	.6523	.7310	.3587-02	.1925-02	1.397	549.0	88.99
121	.40000	.70000	62.000	.4902	.5956	.6674	.3586-02	.1759-02	1.278	547.6	87.57
121	.40000	.80000	63.000	.4263	.5175	.5795	.3584-02	.1528-02	1.115	544.9	84.89
121	.40000	.90000	64.000	.3319	.4027	.4507	.3582-02	.1189-02	.8704	542.2	82.24
121	.60000	.10000+00	65.000	1.292	1.578	1.775	.3600-02	.4651-02	3.296	565.8	105.8
121	.60000	.20000	66.000	1.230	1.502	1.688	.3598-02	.4426-02	3.148	563.2	103.2
121	.60000	.30000	67.000	1.062	1.295	1.455	.3596-02	.3818-02	2.724	560.9	100.9
121	.60000	.40000	68.000	1.008	1.230	1.381	.3596-02	.3626-02	2.590	560.1	100.1
121	.60000	.50000	69.000	.9416	1.148	1.289	.3595-02	.3385-02	2.424	558.5	98.46
121	.60000	.60000	70.000	.8535	1.040	1.167	.3593-02	.3067-02	2.205	555.7	95.69
121	.60000	.70000	71.000	.7602	.9252	1.038	.3591-02	.2730-02	1.959	553.4	93.40
121	.60000	.80000	72.000	.6070	.7381	.8273	.3589-02	.2178-02	1.578	550.2	90.16
121	.60000	.90000	73.000	.4346	.5278	.5912	.3585-02	.1558-02	1.135	546.1	86.10
121	.80000	.20000	74.000	1.180	1.440	1.617	.3596-02	.4244-02	3.030	560.5	100.5
121	.80000	.40000	75.000	.8650	1.054	1.182	.3590-02	.3109-02	2.245	552.3	92.32
121	.80000	.60000	76.000	.6797	.8259	.9254	.3587-02	.2438-02	1.771	548.1	88.06

ORIGINAL PAGE IS
 OF POOR QUALITY

OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW06)

WING LOWER SURFACE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
134	6.460	5.313	30.00	.0000	2880.	1157.	2530.	2.594

TEST DATA

RUN NUMBER	2Y/B	X/C	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
134	.40000	.50000-01	55.000	1.562	1.970	2.266	.4132-02	.6454-02	3.605	587.9	127.9
134	.40000	.10000+00	56.000	1.467	1.844	2.116	.4125-02	.6051-02	3.424	580.6	120.6
134	.40000	.20000	57.000	1.142	1.428	1.632	.4112-02	.4696-02	2.715	568.5	108.5
134	.40000	.30000	58.000	.8977	1.119	1.277	.4105-02	.3685-02	2.155	561.8	101.8
134	.40000	.40000	59.000	.7843	.9769	1.114	.4103-02	.3218-02	1.889	559.6	99.62
134	.40000	.50000	60.000	.7020	.8734	.9950	.4100-02	.2878-02	1.696	557.2	97.21
134	.40000	.60000	61.000	.6347	.7891	.8985	.4098-02	.2601-02	1.538	555.5	95.50
134	.40000	.70000	62.000	.5752	.7197	.8191	.4097-02	.2373-02	1.406	553.9	93.91
134	.40000	.80000	63.000	.5042	.6257	.7115	.4094-02	.2064-02	1.229	551.0	91.03
134	.40000	.90000	64.000	.3922	.4961	.5522	.4090-02	.1604-02	.9605	547.8	87.83
134	.60000	.10000+00	65.000	1.448	1.815	2.079	.4119-02	.5965-02	3.411	574.7	114.7
134	.60000	.20000	66.000	1.412	1.769	2.024	.4117-02	.5812-02	3.333	573.1	113.1
134	.60000	.30000	67.000	1.215	1.520	1.738	.4113-02	.4998-02	2.883	569.8	109.8
134	.60000	.40000	68.000	1.138	1.423	1.626	.4112-02	.4680-02	2.707	568.3	108.3
134	.60000	.50000	69.000	1.066	1.331	1.520	.4109-02	.4380-02	2.544	565.7	105.7
134	.60000	.60000	70.000	.9715	1.212	1.383	.4106-02	.3989-02	2.327	563.1	103.1
134	.60000	.70000	71.000	.8709	1.085	1.237	.4104-02	.3574-02	2.095	560.4	100.4
134	.60000	.80000	72.000	.7002	.8713	.9925	.4100-02	.2871-02	1.692	557.1	97.12
134	.60000	.90000	73.000	.5013	.6226	.7082	.4095-02	.2053-02	1.220	552.3	92.30
134	.80000	.20000	74.000	1.333	1.666	1.904	.4112-02	.5481-02	3.171	568.0	108.0
134	.80000	.40000	75.000	1.052	1.311	1.495	.4105-02	.4317-02	2.526	561.5	101.5
134	.80000	.60000	76.000	.9000	1.120	1.277	.4102-02	.3692-02	2.172	559.4	99.45

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW08)

WING LOWER SURFACE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
130	6.200	3.121	30.00	1.000	3020.	1260.	1706.	1.800

TEST DATA

RUN NUMBER	2Y/B	X/C	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
130	.40000	.50000-01	55.000	1.392	1.724	1.957	.3572-02	.4972-02	3.256	593.7	133.7
130	.40000	.10000+00	56.000	1.342	1.657	1.878	.3567-02	.4786-02	3.169	586.7	126.7
130	.40000	.20000	57.000	1.014	1.246	1.406	.3556-02	.3605-02	2.441	571.6	111.6
130	.40000	.30000	58.000	.8003	.9805	1.105	.3550-02	.2841-02	1.947	563.2	103.2
130	.40000	.40000	59.000	.6899	.8445	.9510	.3547-02	.2447-02	1.684	560.3	100.3
130	.40000	.50000	60.000	.6223	.7610	.8564	.3545-02	.2206-02	1.525	557.3	97.30
130	.40000	.60000	61.000	.5707	.6975	.7846	.3543-02	.2022-02	1.402	555.2	95.19
130	.40000	.70000	62.000	.5152	.6292	.7075	.3542-02	.1825-02	1.269	553.1	93.09
130	.40000	.80000	63.000	.4487	.5473	.6149	.3539-02	.1588-02	1.110	549.6	89.56
130	.40000	.90000	64.000	.3586	.4369	.4905	.3536-02	.1268-02	.8911	545.7	85.72
130	.60000	.10000+00	65.000	1.369	1.686	1.907	.3562-02	.4874-02	3.261	579.6	119.6
130	.60000	.20000	66.000	1.261	1.553	1.756	.3561-02	.4491-02	3.011	578.3	118.3
130	.60000	.30000	67.000	1.111	1.366	1.544	.3558-02	.3953-02	2.666	574.2	114.2
130	.60000	.40000	68.000	1.048	1.288	1.454	.3557-02	.3727-02	2.520	572.6	112.6
130	.60000	.50000	69.000	1.000	1.228	1.386	.3554-02	.3554-02	2.414	569.5	109.5
130	.60000	.60000	70.000	.9364	1.148	1.295	.3552-02	.3326-02	2.271	566.0	106.0
130	.60000	.70000	71.000	.8532	1.045	1.178	.3549-02	.3028-02	2.078	562.3	102.3
130	.60000	.80000	72.000	.6815	.8335	.9381	.3545-02	.2416-02	1.669	557.6	97.63
130	.60000	.90000	73.000	.4863	.5937	.6674	.3541-02	.1722-02	1.199	552.1	92.07
130	.80000	.20000	74.000	1.228	1.508	1.703	.3556-02	.4365-02	2.955	571.5	111.5
130	.80000	.40000	75.000	.9825	1.203	1.355	.3548-02	.3486-02	2.396	561.3	101.3
130	.80000	.60000	76.000	.8017	.9805	1.104	.3545-02	.2842-02	1.964	557.7	97.65

ORIGINAL PAGE IS
 OF POOR QUALITY

OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW08)

WING LOWER SURFACE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = .0000

TEST CONDITIONS

RUN NUMBER	MACH	RN/L x10.5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TC DEG.R	PO PSI	PT2 PSI
137	6.480	5.244	30.00	1.000	2890.	1164.	2622.	2.528

TEST DATA

RUN NUMBER	2Y/B	X/C	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
137	.40000	.50000-01	55.000	1.602	2.035	2.353	.4107-02	.6581-02	3.603	606.0	146.0
137	.40000	.10000+00	56.000	1.551	1.963	2.263	.4100-02	.6360-02	3.530	598.4	138.4
137	.40000	.20000	57.000	1.172	1.474	1.692	.4087-02	.4792-02	2.724	585.1	125.1
137	.40000	.30000	58.000	.8706	1.092	1.250	.4020-02	.3552-02	2.043	578.3	118.3
137	.40000	.40000	59.000	.7766	.9728	1.113	.4078-02	.3167-02	1.828	576.3	116.3
137	.40000	.50000	60.000	.7144	.8939	1.022	.4076-02	.2912-02	1.688	573.8	113.8
137	.40000	.60000	61.000	.6591	.8239	.9417	.4074-02	.2685-02	1.562	571.8	111.8
137	.40000	.70000	62.000	.6036	.7540	.8614	.4072-02	.2458-02	1.434	569.9	109.9
137	.40000	.80000	63.000	.5321	.6638	.7575	.4069-02	.2165-02	1.270	566.8	106.8
137	.40000	.90000	64.000	.4034	.5062	.5770	.4065-02	.1652-02	.9755	563.1	103.1
137	.60000	.10000+00	65.000	1.498	1.891	2.176	.4095-02	.6135-02	3.438	593.1	133.1
137	.60000	.20000	66.000	1.406	1.774	2.040	.4093-02	.5756-02	3.236	591.4	131.4
137	.60000	.30000	67.000	1.208	1.521	1.748	.4090-02	.4940-02	2.793	588.2	128.2
137	.60000	.40000	68.000	1.119	1.408	1.617	.4089-02	.4574-02	2.591	587.0	127.0
137	.60000	.50000	69.000	1.052	1.322	1.517	.4087-02	.4298-02	2.445	584.7	124.7
137	.60000	.60000	70.000	.9682	1.216	1.394	.4084-02	.3954-02	2.259	582.1	122.1
137	.60000	.70000	71.000	.8826	1.107	1.268	.4081-02	.3602-02	2.068	579.4	119.4
137	.60000	.80000	72.000	.7293	.9133	1.045	.4078-02	.2974-02	1.718	575.8	115.8
137	.60000	.90000	73.000	.5380	.6718	.7673	.4071-02	.2190-02	1.279	569.4	109.4
137	.80000	.20000	74.000	1.336	1.681	1.930	.4088-02	.5463-02	3.102	585.6	125.6
137	.80000	.40000	75.000	.9919	1.231	1.409	.4080-02	.4006-02	2.306	577.9	117.9
137	.80000	.60000	76.000	.8467	1.060	1.213	.4077-02	.3452-02	1.995	575.5	115.5

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW09)

WING LOWER SURFACE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = 90.00

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
128	6.140	2.968	30.00	.0000	3080.	1296.	1726.	1.852

TEST DATA

RUN NUMBER	2Y/B	X/C	T/C NO	H/HREF R=1.0	H/HREF P=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
128	.40000	.50000-01	55.000	1.437	1.769	2.000	.3665-02	.5266-02	3.637	593.8	133.8
128	.40000	.10000+00	56.000	1.374	1.688	1.906	.3661-02	.5032-02	3.509	587.1	127.1
128	.40000	.20000	57.000	1.015	1.242	1.398	.3652-02	.3708-02	2.632	574.5	114.5
128	.40000	.30000	58.000	.7974	.9736	1.095	.3647-02	.2908-02	2.082	568.4	108.4
128	.40000	.40000	59.000	.7046	.8599	.9664	.3646-02	.2569-02	1.844	566.8	106.8
128	.40000	.50000	60.000	.6508	.7937	.8916	.3645-02	.2372-02	1.707	564.7	104.7
128	.40000	.60000	61.000	.5899	.7191	.8075	.3643-02	.2149-02	1.550	563.0	103.0
128	.40000	.70000	62.000	.5324	.6487	.7292	.3642-02	.1939-02	1.402	561.4	101.4
128	.40000	.80000	63.000	.4637	.5645	.6332	.3640-02	.1698-02	1.226	558.1	98.15
128	.40000	.90000	64.000	.3555	.4322	.4845	.3637-02	.1293-02	.9444	554.0	94.04
128	.60000	.10000+00	65.000	1.371	1.682	1.898	.3659-02	.5016-02	3.511	584.4	124.4
128	.60000	.20000	66.000	1.291	1.584	1.787	.3658-02	.4723-02	3.311	583.3	123.3
128	.60000	.30000	67.000	1.133	1.388	1.564	.3655-02	.4140-02	2.918	579.7	119.7
128	.60000	.40000	68.000	1.051	1.287	1.450	.3654-02	.3840-02	2.712	578.1	118.1
128	.60000	.50000	69.000	.9789	1.198	1.349	.3652-02	.3575-02	2.534	575.5	115.5
128	.60000	.60000	70.000	.9153	1.119	1.259	.3650-02	.3341-02	2.380	572.0	112.0
128	.60000	.70000	71.000	.8331	1.017	1.144	.3648-02	.3039-02	2.174	568.9	108.9
128	.60000	.80000	72.000	.6782	.8271	.9291	.3645-02	.2472-02	1.779	564.6	104.6
128	.60000	.90000	73.000	.4799	.5843	.6556	.3640-02	.1747-02	1.268	558.7	98.73
128	.80000	.20000	74.000	1.193	1.463	1.649	.3657-02	.4364-02	3.068	581.3	121.3
128	.80000	.40000	75.000	.9079	1.110	1.249	.3650-02	.3314-02	2.361	571.8	111.8

OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW09)

WING LOWER SURFACE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 6.000 ALPHAS = 30.00
 PHI = .0000 PHIS = 90.00

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
133	6.460	5.645	30.00	.0000	2870.	1154.	2626.	2.691

TEST DATA

RLN NUMBER	2Y/B	X/C	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
133	.40000	.50000-01	55.000	1.765	2.219	2.548	.4196-02	.7404-02	4.169	580.5	120.5
133	.40000	.10000+00	56.000	1.590	1.994	2.284	.4189-02	.6660-02	3.792	574.2	114.2
133	.40000	.20000	57.000	1.152	1.440	1.645	.4181-02	.4817-02	2.782	566.1	106.1
133	.40000	.30000	58.000	.8556	1.068	1.219	.4177-02	.3574-02	2.077	562.5	102.5
133	.40000	.40000	59.000	.7225	.9013	1.029	.4176-02	.3017-02	1.755	562.0	102.0
133	.40000	.50000	60.000	.6402	.7983	.9107	.4175-02	.2673-02	1.558	560.7	100.7
133	.40000	.60000	61.000	.5791	.7216	.8230	.4174-02	.2417-02	1.412	559.5	99.49
133	.40000	.70000	62.000	.5256	.6547	.7463	.4172-02	.2193-02	1.284	558.2	98.23
133	.40000	.80000	63.000	.4682	.5825	.6634	.4169-02	.1952-02	1.148	555.2	95.24
133	.40000	.90000	64.000	.3577	.4443	.5056	.4166-02	.1490-02	.8815	551.3	91.93
133	.60000	.10000+00	65.000	1.566	1.962	2.245	.4186-02	.6557-02	3.754	571.0	111.0
133	.60000	.20000	66.000	1.503	1.881	2.152	.4185-02	.6290-02	3.609	569.8	109.8
133	.60000	.30000	67.000	1.280	1.601	1.831	.4183-02	.5355-02	3.081	568.3	108.3
133	.60000	.40000	68.000	1.188	1.486	1.699	.4183-02	.4971-02	2.862	567.8	107.8
133	.60000	.50000	69.000	1.086	1.357	1.551	.4181-02	.4539-02	2.619	566.5	106.5
133	.60000	.60000	70.000	.9966	1.245	1.422	.4179-02	.4165-02	2.412	564.6	104.6
133	.60000	.70000	71.000	.9126	1.139	1.300	.4177-02	.3812-02	2.216	562.3	102.3
133	.60000	.80000	72.000	.7376	.9191	1.048	.4173-02	.3078-02	1.799	559.3	99.29
133	.60000	.90000	73.000	.5131	.6381	.7267	.4169-02	.2139-02	1.260	554.8	94.77
133	.80000	.20000	74.000	1.322	1.655	1.892	.4184-02	.5533-02	3.180	568.9	108.9
133	.80000	.40000	75.000	1.050	1.311	1.496	.4178-02	.4388-02	2.548	563.0	103.0

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OH45 HEATING RATE - COLLATION

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OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW10)

WING LOWER SURFACE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = 90.00

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
129	6.130	3.008	30.00	1.000	3085.	1299.	1749.	1.878

TEST DATA

RUN NUMBER	2Y/B	X/C	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
129	.40000	.50000-01	55.000	1.485	1.828	2.067	.3696-02	.5488-02	3.795	595.7	135.7
129	.40000	.10000+00	56.000	1.412	1.735	1.959	.3691-02	.5213-02	3.640	589.0	129.0
129	.40000	.20000	57.000	1.039	1.271	1.431	.3682-02	.3824-02	2.719	576.2	116.2
129	.40000	.30000	58.000	.8031	.9807	1.103	.3677-02	.2953-02	2.118	570.1	110.1
129	.40000	.40000	59.000	.7195	.8783	.9872	.3676-02	.2645-02	1.901	568.6	108.6
129	.40000	.50000	60.000	.6604	.8056	.9051	.3675-02	.2427-02	1.749	566.5	106.5
129	.40000	.60000	61.000	.6118	.7458	.8376	.3673-02	.2247-02	1.624	564.7	104.7
129	.40000	.70000	62.000	.5428	.6614	.7426	.3672-02	.1993-02	1.443	563.0	103.0
129	.40000	.80000	63.000	.4662	.5675	.6357	.3670-02	.1711-02	1.245	559.9	99.86
129	.40000	.90000	64.000	.3638	.4424	.4959	.3667-02	.1334-02	.9755	555.9	95.93
129	.60000	.10000+00	65.000	1.394	1.710	1.930	.3669-02	.5141-02	3.605	586.0	126.0
129	.60000	.20000	66.000	1.320	1.620	1.827	.3668-02	.4870-02	3.422	584.6	124.6
129	.60000	.30000	67.000	1.161	1.422	1.603	.3665-02	.4277-02	3.020	581.2	121.2
129	.60000	.40000	68.000	1.085	1.329	1.498	.3664-02	.3998-02	2.828	579.9	119.9
129	.60000	.50000	69.000	1.011	1.237	1.393	.3663-02	.3723-02	2.643	577.5	117.5
129	.60000	.60000	70.000	.9337	1.142	1.285	.3660-02	.3436-02	2.451	574.0	114.0
129	.60000	.70000	71.000	.8594	1.050	1.181	.3678-02	.3161-02	2.265	571.0	111.0
129	.60000	.80000	72.000	.7072	.8628	.9694	.3675-02	.2599-02	1.872	566.8	106.8
129	.60000	.90000	73.000	.5056	.6157	.6909	.3671-02	.1856-02	1.348	560.9	100.9
129	.80000	.20000	74.000	1.190	1.459	1.645	.3666-02	.4387-02	3.092	582.5	122.5
129	.80000	.40000	75.000	.8837	1.080	1.214	.3679-02	.3251-02	2.326	571.9	111.9

ORIGINAL PAGE IS
 OF POOR QUALITY

OH45

B22C7W111M4V7F5 WING LOWER SURFACE

(RQSW10)

WING LOWER SURFACE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 1.000 MACH = 6.000 ALPHAS = 30.00
 PHI = -2.000 PHIS = 90.00

TEST CONDITIONS

RUN NUMBER	MACH	RN/L X10 5 /FT	ALPHA DEG.	BETA DEG.	V FT/SEC	TO DEG.R	PO PSI	PT2 PSI
132	6.470	6.124	30.00	1.000	2825.	1128.	2606.	2.790

TEST DATA

RUN NUMBER	2Y/B	X/C	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF BTU/R FT2SEC	H BTU/R FT2SEC	QDOT BTU/ FT2SEC	TAW DEG. R	TCAL DEG. F
132	.40000	.50000-01	55.000	1.410	1.796	2.080	.4242-02	.5992-02	3.143	592.5	132.5
132	.40000	.10000+00	56.000	1.732	2.174	2.493	.4210-02	.7290-02	4.040	563.7	103.7
132	.40000	.20000	57.000	1.184	1.483	1.697	.4203-02	.4978-02	2.790	557.4	97.41
132	.40000	.30000	58.000	.8614	1.077	1.232	.4200-02	.3618-02	2.037	555.0	94.98
132	.40000	.40000	59.000	.7386	.9236	1.056	.4200-02	.3102-02	1.746	555.0	94.96
132	.40000	.50000	60.000	.6662	.8328	.9519	.4200-02	.2798-02	1.577	554.2	94.24
132	.40000	.60000	61.000	.6049	.7560	.8639	.4199-02	.2540-02	1.434	553.4	93.39
132	.40000	.70000	62.000	.5512	.6886	.7866	.4198-02	.2314-02	1.308	552.5	92.54
132	.40000	.80000	63.000	.4168	.5218	.5970	.4203-02	.1752-02	.9823	557.2	97.19
132	.40000	.90000	64.000	.3839	.4784	.5456	.4192-02	.1609-02	.9181	547.4	87.44
132	.60000	.10000+00	65.000	1.673	2.100	2.406	.4209-02	.7042-02	3.910	562.6	102.6
132	.60000	.20000	66.000	1.552	1.947	2.231	.4208-02	.6530-02	3.631	561.9	101.9
132	.60000	.30000	67.000	1.325	1.662	1.904	.4207-02	.5576-02	3.105	561.1	101.1
132	.60000	.40000	68.000	1.218	1.527	1.749	.4207-02	.5124-02	2.854	560.9	100.9
132	.60000	.50000	69.000	1.121	1.405	1.609	.4207-02	.4715-02	2.628	560.4	100.4
132	.60000	.60000	70.000	1.028	1.288	1.475	.4205-02	.4324-02	2.417	558.8	98.83
132	.60000	.70000	71.000	.9412	1.178	1.349	.4203-02	.3956-02	2.219	556.9	96.89
132	.60000	.80000	72.000	.7650	.9577	1.095	.4200-02	.3217-02	1.812	554.5	94.49
132	.60000	.90000	73.000	.5501	.6863	.7834	.4194-02	.2307-02	1.311	549.7	89.70
132	.80000	.20000	74.000	1.334	1.673	1.916	.4207-02	.5613-02	3.123	560.6	100.6
132	.80000	.40000	75.000	.9707	1.214	1.388	.4201-02	.4078-02	2.294	555.3	95.26